PALACKY UNIVERSITY IN OLOMOUC
Faculty of Natural Sciences
Department of Development Studies

Political and Economic Transformations in the Middle East and their Implications for Development – Comparative Study of Egypt, Iran, Saudi Arabia and Turkey

Politické a ekonomické transformace na Blízkém východě a jejich dopad na rozvoj - Srovnávací studie Egypta, Íránu, Saúdské Arábie a Turecka

Master Thesis

Bc. Zbyněk WOJKOWSKI

Supervisor: Ing. Mgr. Jaromír HARMÁČEK, Ph.D.

Olomouc
2013

I declare in lieu of oath that I wrote this thesis myself. All information derived from the work of others has been acknowledged in the text and a list of references is given.

Olomouc, 30 May 2013

UNIVERZITA PALACKÉHO V OLOMOUCI
Přírodovědecká fakulta
Akademický rok: 2010/2011

ZADÁNÍ DIPLOMOVÉ PRÁCE

(PROJEKTU, UMĚLECKÉHO DÍLA, UMĚLECKÉHO VÝKONU)

Jméno a příjmení:	Bc. Zbyněk WOJKOWSKI
Osobní číslo:	R100727
Studijní program:	N1301 Geografie
Studijní obor:	Mezinárodní rozvojová studia
Název tématu:	Politické a ekonomické transformace na Blízkém východě a jejich dopad na rozvoj - Srovnávací studie Egypta, Íránu, Saúdské Arábie a Turecka
Zadávající katedra:	Katedra rozvojových studií

Zásady pro vypracování:

The aim of the thesis is to assess the influence of political and economic transformations in the Middle East on the level of achieved socio-economic development in the second half of the 20th century and at the beginning of the new millennium by the means of comparing four countries - Egypt, Iran, Saudi Arabia and Turkey. Relevant socio-economic indicators will be selected based on which development trends in the focus countries will be identified. Observed trends will be related to changes in domestic policies or external influences, analyzed and a comparison of the case countries will be made. Annexes and other terms will be processed continuously. Extent of the graphics: as necessary. Extent of the report: 20 000 - 25 000 words.

Rozsah grafických prací:	dle potřeby
Rozsah pracovní zprávy:	20 - 25 tisíc slov
Forma zpracování diplomové práce:	tištěná/elektronická

Seznam odborné literatury:

Askari, Hossein. 2006. Middle East Oil Exporters: What Happened to Economic Development? Cheltham: Edward Elgar Publishing. Nas, Tevfik F. 2008. Tracing the Economic Transformation of Turkey from the 1920s to EU Accession. Leiden: Koninklijke Brill. Pesaran, Evaleila. 2011. Iran's struggle for economic independence : reform and counter-reform in the post-revolutionary era. New York: Routledge. Looney, Robert E. Title 'Oil revenues and Dutch disease in Saudi Arabia: differential impacts on sectoral growth' in: Revue canadienne d'etudes du developpement, vol. 11 no. 1, 1990, PP. 119-134. Richards, Alan and John Waterbury. 2008. A Political Economy of the Middle East. Boulder: Westview Press. Henry, Clement M. and Robert Springborg. 2010. Globalization and the Politics of Development in the Middle East. New York: Cambridge University Press.

Vedoucí diplomové práce:	Ing. Jaromír Harmáček Katedra rozvojových studií
Datum zadání diplomové práce:	17. ledna 2011
Termín odevzdání diplomové práce:	21. ledna 2013

Acknowledgment

I would like to express special gratitude to my supervisor Ing. Mgr. Jaromír Harmáček, Ph.D. for his valuable advice and guidance.

Abstract

This thesis looks at the history of socio-economic development in the region of the broader Middle East reviewing the experience of four major countries of the region – Egypt, Iran, Saudi Arabia, and Turkey – during the second half of the twentieth century and during the first decade of the new millennium. After providing a definition of socio-economic development, the thesis identifies major trends in the socio-economic development of the case countries as measured by various indicators of economic development, health, education, and gender equality. Those trends are linked to major political and economic transformations that took place in the case countries with a particular attention given to government policy.

The thesis concludes that government policy plays a crucial role in affecting socio-economic development. Other factors, such as endowment with natural resources or external political situation are only of secondary importance and the policies of national governments largely determine their influence on socio-economic development. The thesis shows that developing countries without mineral resources can achieve economic development as much as countries with adverse external conditions and economic difficulties can be successful in promoting human development. On the other hand, rich mineral resources or other sources of 'cheap' foreign exchange and favorable external relations do not guarantee progress in any aspect of development.

Keywords: Political and economic transformations, government policy, quality of life, human development, socio-economic development, Middle East, Egypt, Iran, Saudi Arabia, Turkey

Abstrakt

Tato práce se zaměřuje na socioekonomický rozvoj ve čtyřech vybraných zemích regionu Blízkého východu (Egypt, Írán, Saudská Arábie a Turecko) ve druhé polovině 20. století a během první dekády nového tisíciletí. Práce napřed definuje socioekonomický rozvoj a následně identifikuje na základě pozorování různých indikátorů ekonomického rozvoje, zdraví, vzdělání a gendrové problematiky zásadní trendy socioekonomického rozvoje ve vybraných zemích. Tyto trendy jsou dány do souvislosti s hlavními politickými a ekonomickými transformacemi, které se udály v jednotlivých zemích. Zvláštní pozornost je věnována vládním politikám.

Práce je shrnuta zjištěním, že vládní politiky mají zásadní význam pro socioekonomický rozvoj. Jiné faktory, jako je vybavenost přírodními zdroji nebo zahraničně-politická situace hrají pouze druhotnou roli a jejich vliv na rozvoj je do značné míry určován politikami jednotlivých vlád. Tato práce dále poukazuje na to, že rozvojové země bez nerostných zdrojů mohou dosáhnout ekonomického rozvoje stejně jako země s nepříznivými zahraničními vlivy a ekonomickými problémy mohou dosahovat úspěchů v lidském rozvoji. Na druhou stranu, nerostné bohatství či jiné snadné zdroje deviz ani příznivé zahraniční podmínky nezaručují pokrok v žádném z aspektů rozvoje.

Klíčová slova: Politické a ekonomické transformace, vládní politiky, kvalita života, lidský rozvoj, socioekonomický rozvoj, Blízký východ, Egypt, Írán, Saudská Arábie, Turecko

Table of Contents

List of Figures

List of Abbreviations

EU	European Union
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GNI	Gross National Income
GK$	Geary–Khamis dollar
HDI	Human Development Index
IMF	International Monetary Fund
ISEW	Index of Sustainable Economic Welfare
ISI	Import Substitution Industrialization
MENA	Middle East and North Africa
NATO	North Atlantic Treaty Organization
OECD	Organisation for Economic Co-operation and Development
OEEC	Organisation for European Economic Co-operation
OSCE	Organization for Security and Co-operation in Europe
PPP	Purchasing Power Parity
UAE	United Arab Emirates
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
WB	World Bank
WW II	World War II

1. Introduction

After a period of relative isolation, the region started opening up to foreign influences at the beginning of the 19th century. At the time, the region was lagging behind Europe, then the leading world power, in administration, economy, science, technology, and military. Although the governments in the region set on modernizing their countries, they could not have kept pace with the colonial powers penetrating the region and by the end of the 19th century Europe subjugated the region to her domination either through direct occupation (e.g. Northern Africa) or through economic exploitation (e.g. the Ottoman Empire or Iran). The Middle Eastern countries became suppliers of cash crops for European industries, while foreign merchants, banks, and industrialists controlled en large trade, transport, and finances of the countries. The so-called capitulations granted special advantages to foreign nationals (both individuals and companies) and boards of creditors supervised tax collection, budgets and industries of the individual countries to guarantee the repayment of foreign debt. The oil came into the equation in the 20th centuries and many of the countries became financially dependent on the royalties paid by foreign companies that hold concessions for oil exploitation. A clear dichotomy was established when the 'developed' ruled the 'backward' or 'undeveloped'.

It took until the 1950s and 1960s for the region to gain independence. The 'undeveloped' turned into the 'developing' that pursued policies to catch up with the 'developed' to prevent future domination. As the Middle Eastern countries turned into developmental states, the region became entangled in the antagonisms of the Cold War. As a result, the region engulfed in great economic and political transformations experimenting with socialism, capitalism, democracy, autocracy, and theocracy while receiving foreign aid and suffering from numerous wars and foreign interventions at the same moment. In the process, the fortunes of the nations have changed. What were predominantly traditional rural societies with limited industries in 1950 are today highly urbanized societies producing a large variety of goods and services. The people of the Middle East live on average longer and healthier lives, are more educated, and enjoy greater material standard of living than they did sixty years ago at the beginning of those transformations.

This does not however mean that progress was a universal and unilateral process in the Middle East. Some have done better than the others have, which holds

true not only for the individual countries but also for their people. While in some countries, large segments of the population benefited from the process of ongoing change, in others absolute poverty and inequality of the many prevailed to the great detriment of the development of the affected countries as a whole.

The oil has been a major factor determining the fortunes of the region. Those who have it have had a vast potential to improve their lot while those who do not have oil could have only picked the crumbles in the form of remittances sent by their 'gastarbeiters' in the oil rich countries or through financial and material help from the governments awash with petrodollars. Yet, even the oil is not a clear driver of development as some countries lacking it outperformed oil-exporters (e.g. compare Algeria and Tunisia, Iraq and Jordan, Turkey and Egypt).

Therefore, it is the aim of this thesis to assess the causality between political and economic transformations and socio-economic development in the region of the broader Middle East. Further, this thesis looks at what role the governments and their policies played in promoting or hindering development in their countries.

2. Methodology and Structure of the Thesis

The aim of the thesis is to assess the influence of political and economic transformations in the Middle East on the level of achieved socio-economic development in the second half of the 20th century and at the beginning of the new millennium by the means of comparing four countries - Egypt, Iran, Saudi Arabia, and Turkey.

It is the assumption of the author that natural resources and external factors are only of secondary importance to fostering socio-economic development while policies of the national governments are the determining factors of development. The thesis poses the following questions. First, whether countries without mineral resources can achieve high level of economic development in the context of the broader Middle East and second, whether countries with adverse external (i.e. out of government control) conditions and economic difficulties can be successful in promoting socio-economic development. Third, the thesis asks what are the factors determining the success of government policy in fostering development.

In chapter 3, the selection of the case countries and of the focus period is justified. The case countries have been selected due to their relative geographical proximity in the region of the Middle East, their relatively large population in relation to the region (as they contain approximately half of the population of the MENA region), distinct ethnic composition (two Arab and two non-Arab countries). Further, differing natural conditions (mainly in terms of presence of mineral resources – two oil rich and two oil poor countries), and varied political and economic systems (ranging from liberal and open to statist and autarkical economies, and from secular democratic republic and authoritarian dictatorship to absolute monarchy and theocracy) were considered for the selection of the case countries.

The theoretical part of the thesis (chapter 4) provides various definitions of development. These definitions are analyzed and a definition of socio-economic development as understood for the purpose of the thesis is synthesized. In a similar manner, definitions of political and economic transformations are derived. In order to provide ourselves with a means to measure the change in the level of achieved socio-economic development in the case countries, a list of indicators is suggested, representing three main areas – performance of the economy, educational achievement and health condition of the population. Those indicators are assessed

from the perspective of data availability and accuracy for the desired period and countries and the most appropriate ones are selected.

Further, a historical background for each country is given in order to analyze their political and economic systems as well as level of socio-economic development in the era preceding the focus period and during the focus period. Relevant comparisons with the whole region of MENA and with developing countries are made. Based on historical reviews, major changes in the political and economic systems of the focus countries are anticipated in order to be later matched with trends in the selected indicators of socio-economic development.

The practical part (chapter 5), an analysis of the selected indicators of socio-economic development for the case countries and where appropriate also for the region is conducted. The purpose of this analysis is to identify major shifts in the trends of socio-economic indicators (i.e. decline, stagnation, growth or acceleration, deceleration). Based on those shifts, this section identifies periods of interest for each case country. The subsequent analysis of economic and political systems (based on the review of available studies and reports from relevant institutions) as well as of external influences during the periods of interest determines the role of political and economic transformations in fostering or hampering socio-economic development.

3. Purpose of the Thesis

The thesis aims to consider the relation between social and economic transformations and socio-economic development in the broader region of the Middle East and North Africa. The evolution of the socio-economic situation in the case countries during the focus period is researched and particular changes are analyzed in order to determine their causation by changes in policies of the case countries, economic and social policies in particular, as well as in external conditions, mainly political and military conflicts, and changes on the global market.

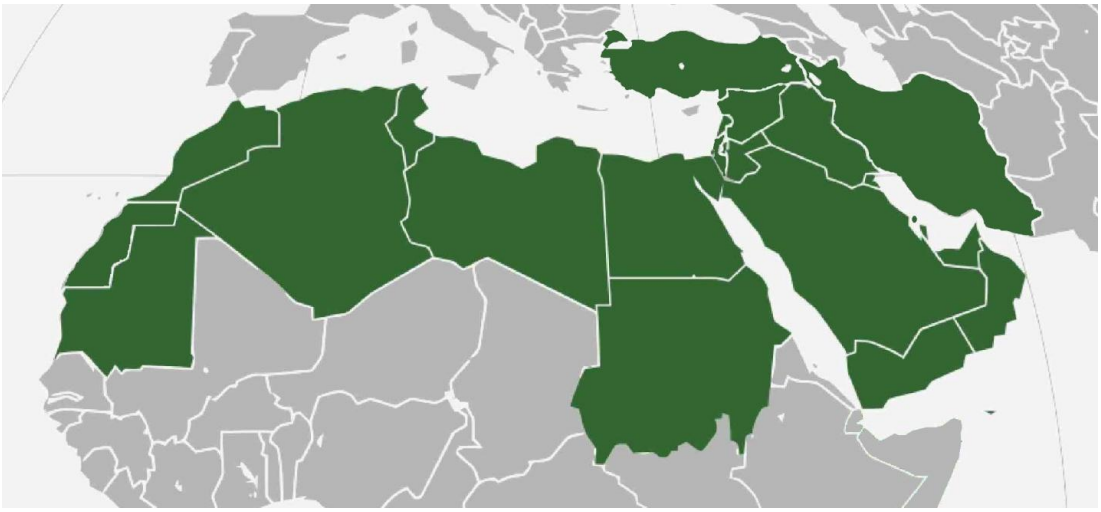
It shall be possible to find out how the differing political and economic systems in the Middle East influence the state of development, to which extent is the development in the region dependent on the extraction of mineral resources and/or on domestic policies and how such a dependence affects capital formation (including human resources) and whether there is a predominance of external or internal factors in the development process. Special attention will be paid to major political transformations (e.g., Nasserist revolution in Egypt, Islamic revolution in Iran, coups d'état in Turkey) in order to see their impact on the economies and wealth distribution of the affected countries and to see whether such domestic transformation are of lasting importance or play only a passing role as they are surpassed by other developments of regional or global character. By such means, it shall be possible to determine by which extent the development of selected countries was spurred or stalled by particular events/policies and to what extent the development of case countries is a result of domestic or external influences. Through cross-comparison between the case countries, it shall be possible to say whether similar policy changes had similar or different impacts. Development challenges specific to the selected countries will be assessed by seeing in which areas development has been slow in the past decades and their causes determined. In the end, it shall be possible to determine sound developmental policies as well as failed reforms with negative impacts on socio-economic development.

3.1. The Region and the Selection of Case Countries

The thesis focuses on the region of the broader Middle East, which can be referred to by a more geographically correct term the Middle East and North Africa (MENA). Although the precise definitions of the borders of the region vary, it

commonly includes an area stretching from Morocco in the west to Iran in the east and from Turkey in the north to Sudan in the south (see Fig. 1).

Figure 1 Middle East and North Africa



Source: Creative Commons, 2011a

Essentially, MENA covers countries with population that is predominantly Arab in ethnicity and Muslim in religion (although with several significant minorities) and historically belonged to the Arab Caliphates (7th to 13th century CE). For historical reasons, Turkey is often also associated with the region since it constituted the heartland of the Ottoman Empire, which for centuries (16th to 19th century CE) ruled much of MENA. Iran, although ethnically distinct from the rest of the region, also belongs to MENA, since its political and economic development has largely followed events in the broader Middle East.

Historically, the area has seen some of the earliest human civilizations, including oldest agriculture, organized government and urban centers, and gave birth to many global religions, such as Judaism, Christianity, Islam and Baha'ism. Despite its preeminence in the antiquity that extended well into the Middle Ages, the region became largely a periphery in the modern era. The process of technological and cultural stagnation culminated in the colonization of the Middle East by European powers in late 19th and early 20th century and in the fall of the Ottoman Empire in 1922. At the same time, the significance of the region started to grow again as it provided the shortest land and naval connection from Europe to the colonies in South

and Southeast Asia with the opening of the Suez Canal in 1869 and later on with the construction of the Baghdad railway, which started in 1903 (Owen, 2008). In 1908, petrol was discovered in Persia, in 1927 in Iraq, and then on the shore of the Persian Gulf in Bahrain in 1932, Saudi Arabia in 1938, and later in various other territories in the area (Rogan, 2009), greatly influencing the fortunes of the region for the future.

Since the Second World War, the region has gone through profound demographic, political, economic and social changes, which can be aligned with the process of decolonization and modernization of third world countries, growing importance of oil in the global economy (according to OPEC, the region has more than 50% of all proven oil reserves; 2012) and growing oil revenues for most countries in the region. Those revenues then initiated far-reaching restructuring of the economies and generated a great amount of wealth. At the same time, an unequal distribution of newly acquired wealth and continued political and economic marginalization of different population groups together with the growing interest in the region among the two blocks of the cold war era has lead to a significant turmoil and strife. As a result, the broader Middle East has become one of the most sensitive and strategically important regions of the World. Against the backdrop of such profound transformations, the thesis aims to asses to which extent political and economic policies of individual governments have led towards the advancement or hindrance of socio-economic development of affected countries.

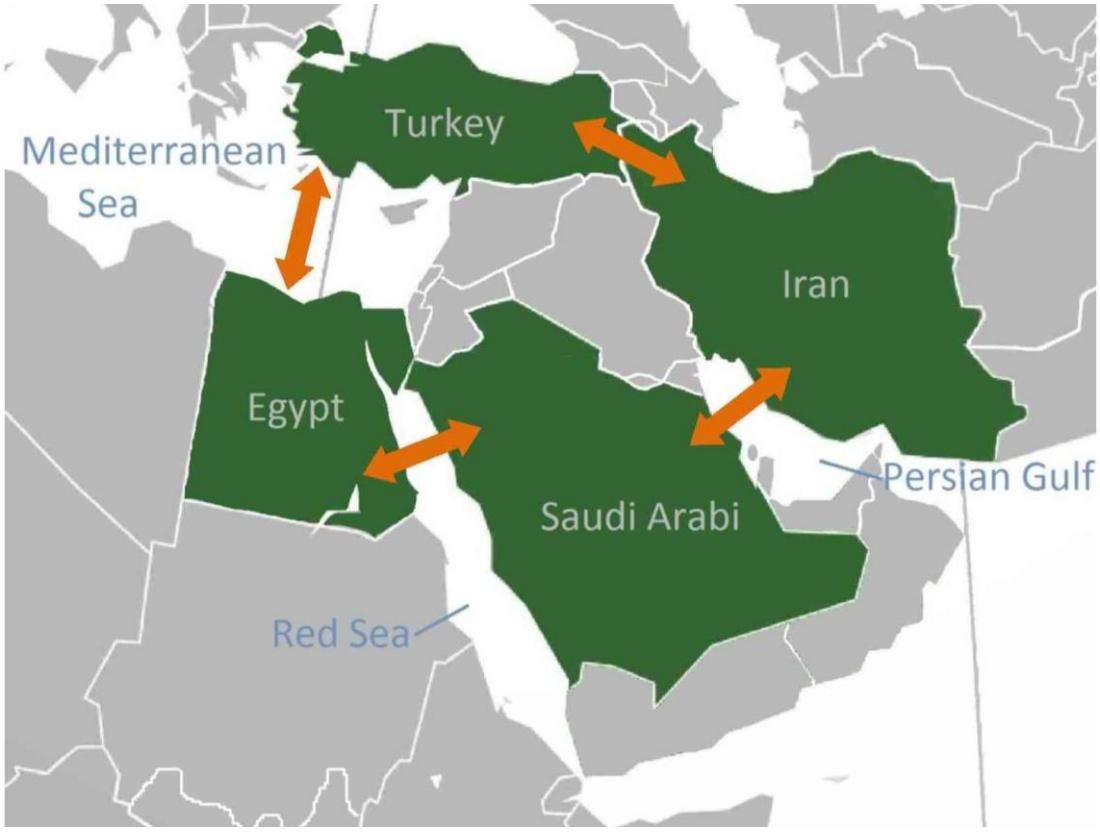
Due to the limited scope of the thesis, it is necessary to select a group of case countries that are to an acceptable extent representative of the whole region and its diversity and yet are similar enough to allow for a meaningful comparative analysis. Thus, the four following countries have been selected: Egypt, Iran, Saudi Arabia, and Turkey. The case countries have been selected due to their relative geographical proximity in the region of the broader Middle East, their relatively large populations, distinct ethnic and religious composition, differing natural conditions, and varied political and economic systems.

The four case countries are located in Western Asia on the Iranian Plateau, Arab Peninsula, and Asia Minor and in the easternmost section of North Africa.[1] Iran shares land border with Turkey and maritime boundary with Saudi Arabia in the

[1] A relatively small portion of Egyptian territory is located on the Sinai Peninsula in Asia and similarly part of Turkish Territory is also located in Southeast Europe.

Persian Gulf, whereas Saudi Arabia and Egypt straddle the Red Sea. Egypt and Turkey are both located on the shores of the Mediterranean Sea, although, they do not share maritime boundary (see Fig. 2). The four countries cover 5.6 million sq kilometers, which translates into 36.6% of the total area of the broader Middle East (UN STATSa).

Figure 2 Case Countries



Source: Creative Commons, 2011b

The selected countries are characterized by their relatively large populations in relation to the region as they contain approximately half of the MENA region population - exactly 50.9% of the 501 million of the inhabitants in 2010. Egypt, 81 mil., Iran, 74 mil., and Turkey, 73 mil., are also the three most populous countries, whereas Saudi Arabia (28 mil.) ranks 8th among the 23 countries (UN DESAa).[2] A further criterion for the selection of the case countries was distinct ethnic and religious composition in order to represent the variety of the region. Two

[2] See Annex 1 for details.

predominantly Arab (Egypt and Saudi Arabia) and two non-Arab countries (Iran, a country with a majority of Persians and other related Iranian peoples, and Turkey with a Turkish majority) have been chosen. Unlike ethnically homogenous Egypt, the remaining countries have sizeable minorities – Kurds in Turkey and Azeris, Kurds, and Arabs in Iran, and foreign workers from South and Southeast Asia in Saudi Arabia (CIA). Both Turkey and Iran have been plagued for decades by various ethnic conflicts. Although such conflicts have profoundly affected socio-economic development on regional level in the affected countries, their impact on national level is hard to determine. Thus, minorities related economic and social policies and reforms will not be considered in the thesis as there is no sufficient statistical input to assess their impacts. Except predominantly Shia Iran all other case countries have a Sunni majority; at the same time, Egypt has a sizeable Christian minority and Saudi Arabia a Shia minority (ibid).

In terms of natural conditions, the case countries differ in two major factors - the availability of mineral resources and water. Saudi Arabia and Iran rank first and fourth in oil production, second and fourth in oil exports (EIA) and exhibit similarly significant proven reserves (OPEC). Although not a major oil producer or exporter, Egypt earns significant share of its export revenues (32.5% in 2010) from crude oil and derived products, which compares with a still higher share (above 80%) in both Iran and Saudi Arabia (MIT). Further, both Iran and Saudi Arabia are among top ten countries measured by the production and proven reserves of natural gas. However, neither country gains significant amount of export revenues from the exploitation of natural gas as most of the output is consumed domestically (EIA).

Water is also unevenly distributed throughout the region due to the prevailing climate conditions as rainfall declines from subtropical Mediterranean areas in the northwest to arid tropical areas covered with deserts in the southeast. As a result, parts of Turkey and Iran receive more than 2,000 mm of rainfall per year, while in Egypt and Saudi Arabia annual rainfall ranges between zero and 200 mm on most territory (AQUASTATa). Despite great regional disparities both Turkey and Iran can be in general classified as sufficient in water resources with Turkey having 2,873 and Iran 1,832 cu meters of renewable water resources per capita and year available, although by withdrawing two thirds of its available resources Iran is approaching water scarcity

levels (AQUASTATb).[3] On the other hand, Egypt depends on the inflow of water from outside of its territory through the Nile River and with the availability of 694 cu meters of renewable water resources per capita per annum is defined as suffering from water scarcity. Saudi Arabia with 85 cu meter per capita is then said to suffer from absolute scarcity.[4] It is only due to the drilling of fossil water and desalination of sea water that surpass withdrawal from renewal resources by the factor of nine that Saudi Arabia can cover its water consumption (AQUASTATb). In all case countries, the availability of water is a major factor determining spatial distribution of population, agriculture and industry.

The case countries demonstrate a variety of the political systems present in the broader Middle East ranging from relatively free pluralist political system with adherence to human rights and vibrant civil society to authoritarian systems where political parties, civil societies as well as any other rights are severely restricted. In the past, all of the case countries as well as other countries in the region had been through decades of dictatorship and lack of democracy. Among the case countries, Turkey stands out as it was the only electoral democracy in the region (besides Israel) in 2010, defined also as a 'partly free' or a 'hybrid regime' while the remaining case countries and most other countries in the region were 'not free' or 'authoritarian (Economist, 2010; Freedom House, 2010).[5] This is also manifested in one of the indices measuring democracy as Turkey ranked third in the region (89th globally) after Israel and Lebanon in the 2010 Democracy Index while Iran and Saudi Arabia were last in the region along with Libya ranking 158th and 160th globally out of 167 (Economist, 2010).

Turkey is a secular parliamentarian republic that has been aspiring to join the European Union, necessitating further democratization of political life and greater respect for human rights. In the past, the political situation in the country was marked by several coup d'états and military interventions into civilian politics with the last

[3] According to the International Water Management Institute a country withdrawing more than 75% of its river flow is defined as 'physically water scarce' (Brown and Matlock, 2011).
[4] The so called Falkenmark indicator defines countries with more than 1,700 cu m of total annual water runoff per capita as having 'no stress', with between 1,000-1,699 cu m as 'stress', 500-999 cu m as 'scarcity' and with less than 500 cu m as 'absolute scarcity' (Brown and Matlock, 2011).
[5] The American organization Freedom House divides world countries in its Freedom in the World report series into 'free', 'partly free' and 'not free' while distinguishing some as 'electoral democracies'. The Economist Intelligence Unit from Great Britain divides countries according to its Democracy Index into 'full democracies', 'flawed democracies', 'hybrid regimes' and 'authoritarian regimes'.

one taking place in 1997 (Akgun, 2001). Until the revolution of 2011, Egypt was formally defined as a presidential republic with Islam as a state religion, although, under the presidency of Hosni Mubarak the country had been effectively an autocracy without open political competition for close to three decades, 1981-2011, following previous authoritarian governments (Kassem, 2004).

Since the Islamic revolution in 1979 overturned the monarchy, Iran has been an Islamic republic. Within this rather unique theocratic system, Shia clerics have a supreme control over the elected republican institutions (e.g. president and parliament), the judiciary and various aspects of civil life.[6] In contrast to Iran, Saudi Arabia is an absolute monarchy, where the king is the source of executive, legislative and judicial power while the Quran and Sunna are the country's constitution, the Islamic law 'sharia' replaces the civil and penal code while judges are appointed from the rank of Islamic scholars 'ulama' (Carnegie Endowment). The House of Saud has ruled the country since its establishment in 1932 while it had controlled territories on the Arab Peninsula for almost three centuries beforehand (Al-Rasheed, 2002).

Following the unrest in many countries of the region in 2011, several countries have seen democratization of political life. Tunisian and Libya have become electoral democracies and the Egyptian system afforded greater political rights and civil liberties to the citizens (Freedom House, 2013). It remains unclear though, if such developments shall prevail and other countries from the region will join the process of political liberalization.

Similarly varied are the economic systems operated by the case countries as they range from liberal export oriented economies attracting significant amounts of foreign investment to highly restrictive closed economies pursuing policies of central planning and industrialization based on import-substitution. Turkey has been implementing liberal economic policies for the past three decades following a severe debt crisis at the end of the 1970's. As a result, foreign trade and investment have been significantly liberalized and most state companies privatized (Owen and Pamuk, 1998). The process of economic opening has further been manifested by the creation

[6] The Assembly of Experts composed of Islamic scholars elects the Leader of the Revolution ('supreme leader') who then appoints heads of the judiciary, army commanders, and various public officials. The Guardian Council composed of Islamic jurists appointed by the supreme leader approves candidates for presidential, parliamentary, and Assembly of Experts elections and can veto laws passed by the parliament (Iran Human Rights Documentation Center).

of a customs union with the European Union in 1995 and continued negotiation over Turkey's accession to the grouping (Elveren and Kar, 2005).

Egypt started opening its economy to private and foreign investment before Turkey in the mid-1970s (Owen and Pamuk, 1998). Nevertheless, the results have been mixed as the economy continues to be controlled by large companies owned by the state, military or individuals connected to the army and government. During the neoliberal reforms performed in the past two decades several state companies have been reportedly privatized to companies owned by the army and joint ventures with foreign investors often included assets (such as land) owned by the army (Marshall and Stacher, 2012).

Saudi Arabia, in an attempt to diversify its oil-dependent economy, has been engaging in a command economy system setting five-year development plans implemented by companies subsidized from oil revenues, while the role of private companies is largely limited to services and retail (Niblock and Malik, 2007). From among the case countries, Iran has the most regulated economy as the state has been practicing a statist model of development for several decades (preceding the Islamic revolution).[7] The economy of Iran has been dominated by state run companies and banks developing import substitution industries as the country is striving to diversify the economy and to offset its international isolation and the economic sanctions that have been imposed by several countries following the Islamic revolution of 1979 (Esfahani and Pesaran, 2009). Another feature of the Iranian economy is extensive price controls and subsidies on foodstuff and gasoline as well as high import tariffs (WBc, Heritage Foundation, 2010). According to the gross national income per capita Saudi Arabia is defined as a high-income country, Turkey and Iran as upper middle income countries and Egypt as a lower middle income country (WBa).[8] In terms of economic output, the case countries account for 53.4% of the regional GDP.[9] Turkey, Saudi Arabia and Iran represent the three largest regional economies in the respective order and Egypt the fifth (WBd).

[7] This is confirmed by the Index of Economic Freedom, which ranked Iran on the 168th position out of 179 countries measured in 2010 while only Libya had more regulated economy in the region (Heritage Foundation, 2010).

[8] The World Bank divides countries into the following groups according to their GNI per capita and year: high income – US$12,476 or more, upper middle income – $4,036 - $12,475, lower middle income – $1,026 - $4,035, and low income – $1,025 or less (WBb).

[9] The exact value varies according to the source. According to Maddison the share of the case countries on the total GDP of the region was 63% in 2008.

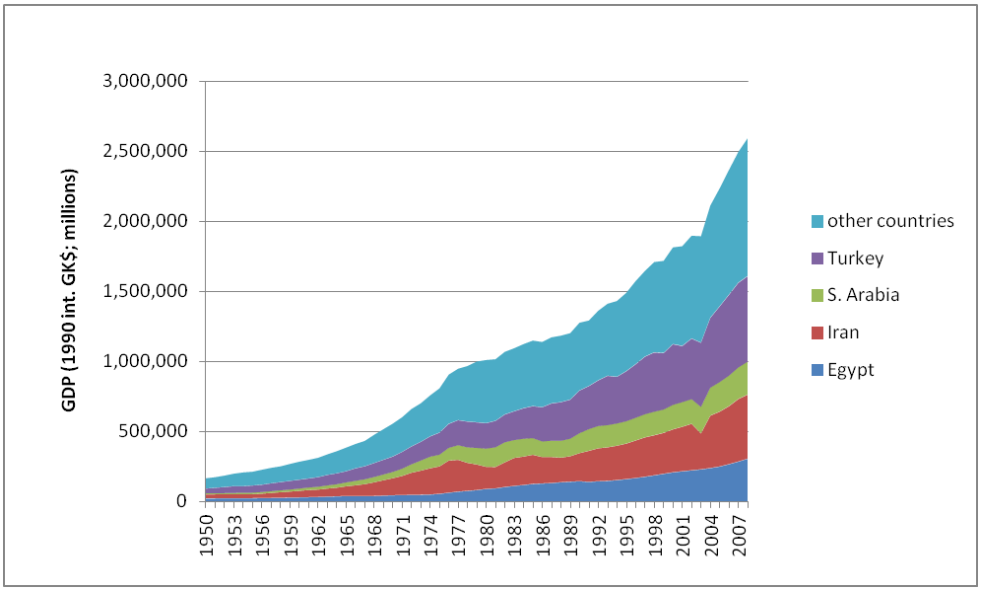
3.2.Selection of Focus Period

Besides selecting appropriate case countries in order to carry out the analysis, it was also necessary to choose a suitable focus period. Although the process of modernization started in the case countries well before the World War II with the penetration of the region by the European powers, either through direct colonization (e.g. Egypt was occupied by Great Britain in 1882) or through economic domination (e.g. in 1881, the finances of the Ottoman Empire came under the control of European creditors as Turkey was unable to repay its debts; Rogan, 2009), there is only limited amount of vital and economic statistics available to analyze this period. It is only after 1950 and later that systematic statistical information or estimates become available. Further, the period after the WW II saw an acceleration of political, social and economic changes in the MENA region (and in developing countries in general). The two main reasons for the rapid changes in the post world war period are the change of the world order, when colonial powers disintegrated and the two new superpowers started competing for dominance over third world countries, followed by the beginning of mass exploitation of oil resources that brought new riches into the region.

The population of the broader Middle East grew between 1950 and 2010 by 340% from the original 114 million inhabitants and similar or higher was the growth for all of the case countries as the population of Turkey grew by 243%, of Egypt by 277%, of Iran by 325% and of Saudi Arabia by 779% (UN DESAb).[10] Concurrently, the GDP of the region expanded by 1,251%. The case countries expanded even more rapidly as the economic output of Saudi Arabia grew by 2,657%, of Turkey by 1,684%, of Iran by 1,526%, and of Egypt by 1,478% (counted from Maddison; see Figure 3 or Annex 2). As the growth of the economic output outpaced the growth of the population, the region has also seen significant growth of GDP in per capita terms (see Figure 4 and Annex 3 for detail). At the same time the quality of life has improved in the region, which may be demonstrated by growing life expectancy or literacy (see Figure 5 and 6, for more detail see Annex 4).

[10] See Annex 1 for details.

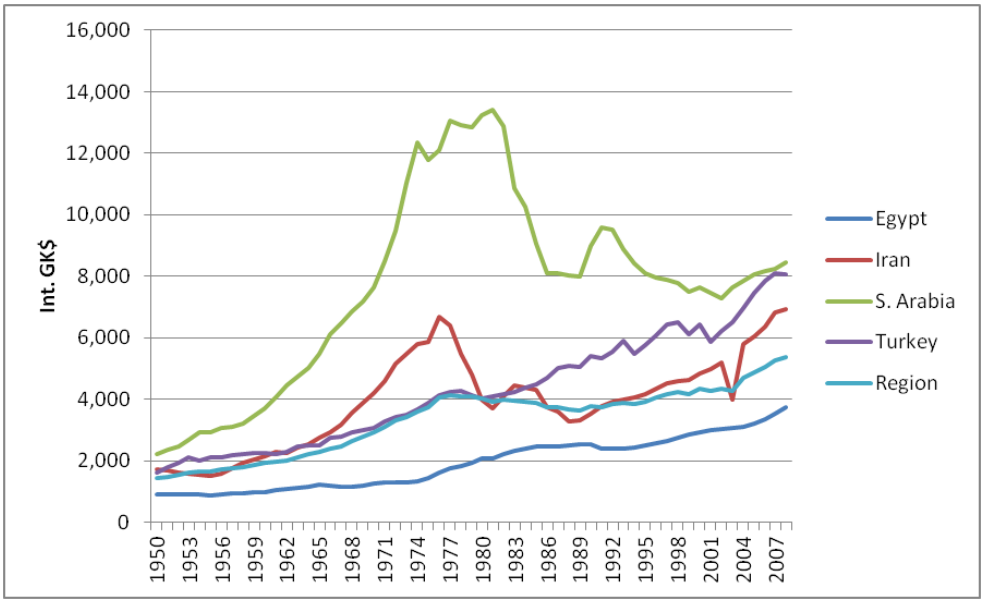
Figure 3 Economic Output of the Region



Source: Maddison

In Figure 3 we can see the rapid expansion of the output of the region. Despite some variation in the trends, the case countries have maintained a high share of the production testifying to their significance in the economy of the region.

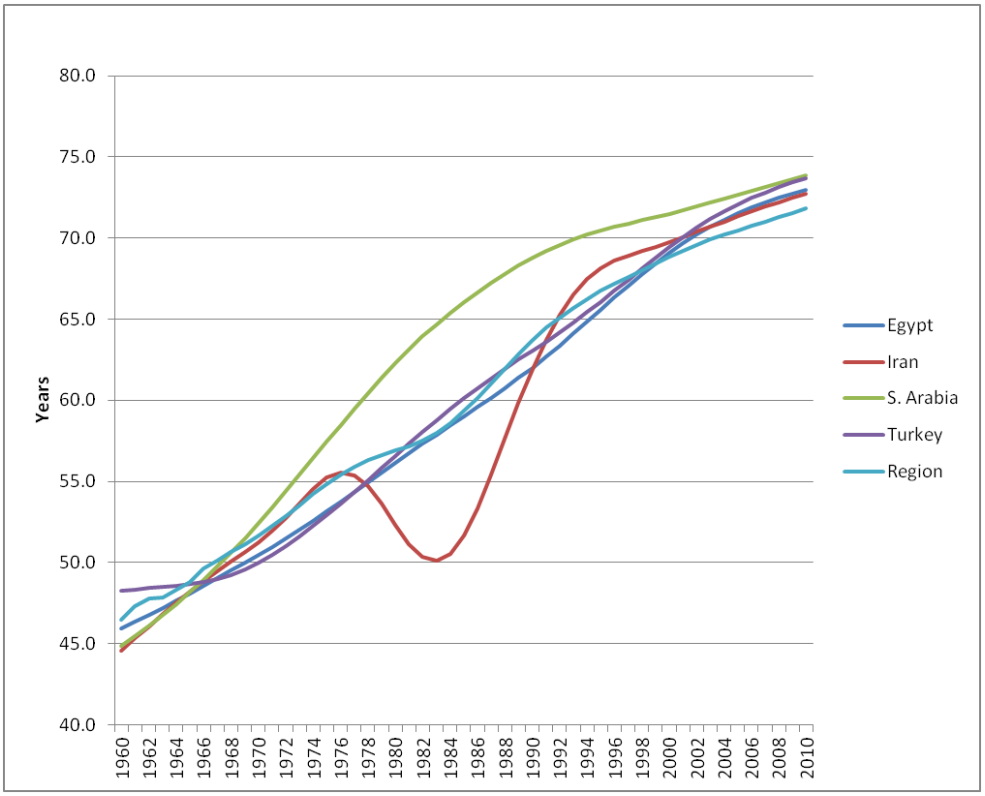
Figure 4 Historical GDP per capita in the region



Source: Maddison

Figure 4 demonstrates the changes in the per capita output of the case countries and of the region. A significant variation shows in the case of Iran and Saudi Arabia reflecting their dependence on changing oil prices as well as political turmoil in Iran in the 1980s.

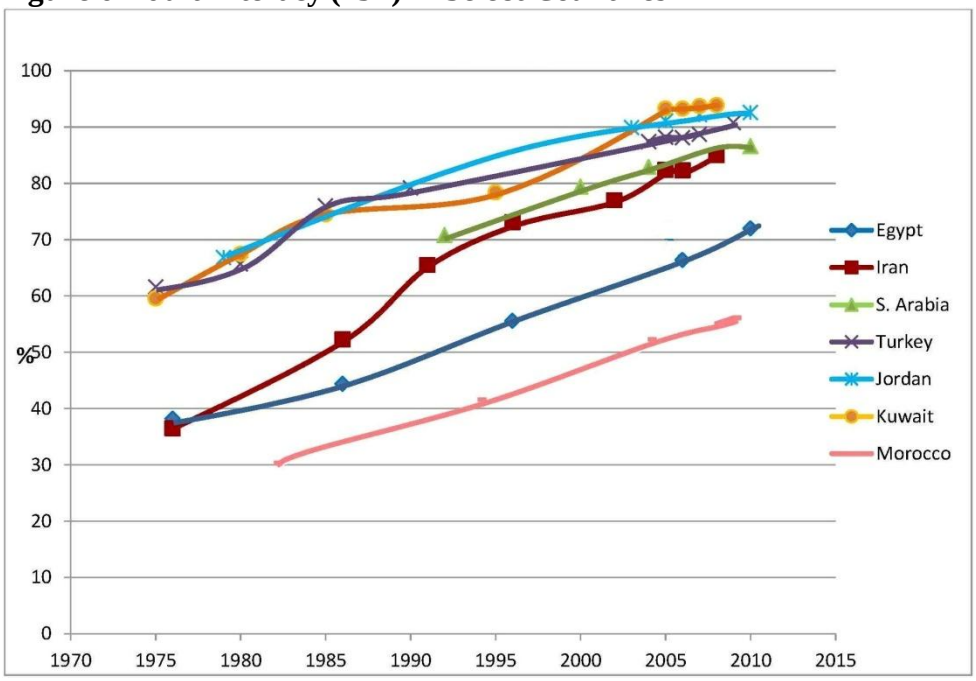
Figure 5 Life Expectancy at Birth



Source: WBe

In Figure 5 we can see the progress in life expectancy achieved by the case countries with fastest improvement in Saudi Arabia. On the other hand, Iran went through a period of declining life expectancy due to the high number of casualties in the war with Iraq.

Figure 6 Adult Literacy (15+) in Select Countries



Source: UIS

Figure 6 testifies to the great improvement in education in the focus region. With the exception of Egypt, the case countries belong to top performers in spreading literacy among its populations (see Annex 4).

During the focus period, the region saw far-reaching political changes – new countries gained independence, established regimes fell apart, while other grew stronger. From the beginning of the Cold War era, the countries of the region became locked in longstanding animosities that often deteriorated into armed conflicts. On domestic scene, the lack of representation and repression by the government nurtured armed opposition struggle taking the form of assassinations, terrorism and full-scale civil wars. Inevitably, such changes have had profound impact on development and governmental policies.

In Egypt, the old monarchy collapsed in a nationalist revolution in 1952, which turned into half a century of authoritarian rule. At the same time, the country has been facing Islamist opposition over secularization of the country and a conflict with Israel over the control of the Sinai Peninsula, Suez Canal and passage in the Straits of Tiran (the Suez Crisis in 1956, Six-Day war in 1967, October War in 1973; Rogan, 2009).

In Turkey, the process of transition to multiparty democracy started in 1945 with the end of the single-party rule. Nevertheless, the process was not finished until the end of the century as instable elected governments were overturned by army coups in 1960, 1971, 1980, and 1997 that were often followed by periods of direct military rule (Akgun, 2001). During the same period Turkey has become increasingly integrated into Western structures, beginning with Turkey's participation in the European Recovery Program (better known as 'Marshall Plan'), membership in the OEEC (the predecessor of OECD) in 1948, and NATO in 1952 (Calis, 2012).

In Iran, an elected government was deposed in 1953 under the pressure from the United States and Britain, whose interests in the Iranian oil industry had been nationalized. Consequently, the strengthened monarchical regime imposed secularization and westernization on the society, which later initiated a popular uprising against the Shah (so called Islamic revolution) and the proclamation of an Islamic republic in 1979 (Fisher et all, 1991). A war with neighboring Iraq (1980-1988) and a conflict with the United States and other western countries followed, precipitating international isolation of the country.

In Saudi Arabia, an oil bonanza starting in early 1950s spurred liberalization of the society. This process came to a sudden end in 1979 as armed Islamist extremists stormed the Grand Mosque of Mecca and took pilgrims as hostages (Al-Rasheed, 2002). After restoring order at the site, the Saudi government responded by strict enforcement of Islamic law in the country while maintaining its hold on power under the disguise of religious conservatism (ibid).

Considering the above mentioned developments, the period of 1950-2010 has been selected for the purpose of the thesis.

4. Theoretical Part

The aim of this chapter is to define some of the phenomena the thesis is dealing with, such as development, socio-economic development or political and economic transformations. Further, the various dimensions of development (e.g. economy, education) are described and appropriate indicators of measurement selected. Relations between these indicators and socio-economic development are established. A brief account of recent history of the case countries is given in order to provide a context for the political and economic transformations that are analyzed in later chapters.

4.1. Definitions

This part looks at various definitions of development. These definitions are analyzed and a simple definition of development sufficient for the purpose this thesis yet highlighting some of the tension between mere economic expansion, growth and socio-economic development is synthesized. In a similar manner, definitions of political and economic transformations are derived.

4.1.1. Development

Since the era of Adam Smith, development has been linked with *economic growth*. That is expansion in the production of goods and services measured over a period of time. Although, Smith used the term 'progress of opulence' rather than development, what he argued is that producing more goods and expanding the market brings more advantage to a greater number of people (Smith, 1784, p. 295). In other words, he said that economic growth results in a greater wealth of a nation.

In development theory, this simplistic approach can be identified with the modernization theory. The American economist Walt Whitman Rostow in his model of economic growth from the 1950s maintains that economic growth will set off the transformation from traditional stagnant agricultural economy and society with a rigid social hierarchy into an age of mass consumption with industrial production and urbanized society. This is according to Rostow the final stage of the process of modernization or development (1959). The policy should than focus on creating preconditions for economic growth, namely increasing capital formation and level of investment to ensure an increase in productivity and technological innovation.

By the 1970s, there was mounting empirical evidence that economic growth does not necessarily translate into the improvement of the quality of life of people denying Rostow's assumption of liner development. For example, high oil revenues may increase national income but this does not necessarily create jobs or better services for the people as the revenues may be squandered for self-enrichment of the rulers or for prestigious yet unproductive projects. Hence, scholars started looking for alternative definitions of development, which were not grounded solely in income (UNDPa). Thus, definitions of *economic development* have emerged.

When compared to simple growth (economic expansion), *economic development* is often described in terms of structural change that accompanies growth (Flamming, 1979). In a narrow understanding of economic development the structural change relates only to a change/improvement in the mode of production or technology used. In a broader understanding, the structural change that takes place during the process of economic development affects the society as a whole. Various authors then distinguish economic development from economic growth by stating that a necessary aspect of development is not only an increase in the income but also its equal distribution (ibid). This understanding of economic development is very useful for the thesis, as it looks how government policies influence the structure of the economy or the distribution of wealth among the people.

The above mentioned requirements of structural change and related increase in equality are included in the definition of economic development by Todaro, and Smith. They stress that *economic development* should be understood '*as a multidimensional process involving major changes in social structures, popular attitudes and national institutions, as well as the acceleration of economic growth, the reduction of inequality, and the eradication of poverty*' (2003 – as cited in Komlos and Snowdon, 2005, p. 88-89). The importance of this definition lies in the connection it establishes between economy, economic growth and quality of life. In this, it is similar to the UN General Assembly Declaration on the Right to Development, which defines development as '*a comprehensive economic, social, cultural and political process, which aims at the constant improvement of the well-being of the entire population and of all individuals on the basis of their active, free and meaningful participation in development and in the fair distribution of benefits resulting therefrom'* (UNGA, 1986). These definitions extend largely beyond the

economic realm into the quality of life or socio-economic development discourse and stress that beyond mere improvement in the economy, development is a multidimensional process with a necessary positive impact on the society and individual. This approach is used by the thesis that looks at development as a wholesome process that involves the economy, the people as a whole as well as individuals.

4.1.2. Human Development

The Indian economist Amartya Sen went even further in his understanding of development as he centers his definition entirely around the individual human being and the possibility (and choice) of satisfying one's basic needs. According to Sen, development is based in 'enlarging people's choices and enhancing human capabilities and freedoms**,** enabling them to: live a long and healthy life, have access to knowledge and a decent standard of living, and participate in the life of their community and decisions affecting their lives' (UNDPa). Sen's definition is essentially that of *human development*. This definition underlies the core concept of the Human Development Index used by UNDP, which measures how the needs for material wealth, health and education are met.[11] The thesis uses the approach of human development in order to assess the wellbeing of the societies in the case countries. The question of choice is particularly relevant to gender equality in the case countries. The thesis points out that women may receive education or health services equitably to men, but they are severely limited in their choice to engage in public life, including employment outside of home.

4.1.3. Socio-economic development

Considering the aforementioned definitions of economic and human development, *socio-economic development* should be understood as a process of economic growth that allows improvement in the quality of the life of the people. Both of these processes are complementary and mutually reinforcing – economic growth allows improvement in the welfare of the people (health, education and material wealth), which then enables the growth of productivity and demand fostering further economic growth, creating a virtuous circle of development. This process has

[11] It should be noted that according to Sen, it is only after the basic needs of long and healthy life, education and material standard to allow decent living have been achieved that people gain the meaningful capability to influence their lives and their community (Sen, 1999). This is why only those former three measures of Sen's definition of human development are included in the HDI.

to be seen within the context of structural change within economy and society – there is an ongoing innovation in the mode and organization of production as well as in the organization of the society, which is becoming increasingly urbanized and educated, requiring changes in the old and creation of new institutions (e.g. bureaucracy, academic institutions, civil society).

The role of government in promoting *socio-economic development* is then to foster economic growth, and subsequently greater equality of income distribution as manifested by the improvement in the quality of life of the people through better provision of governmental services. These services may include public infrastructure (sanitation, drinkable water, roads…), accessibility of healthcare and education (they are not only physically present but also affordable to population). This understanding of socio-economic development is consistent with the purpose of this thesis, which evaluates the role of government in economy and quality of life.

4.1.4. Political and economic transformations

Transformation is often used interchangeably with development but refers mostly to the process of structural change in the economy and society accompanying the growth of production and income. The main effect of such changes shall be sustaining the process of growth (Flamming, 1979). However, as we talk about the role of *structural change*[12] in fostering development, we need to be aware that an integral part of such a change is the government policies that promote these changes. In this regard, policies and related structural change may also have a negative impact on the economy and living standards of the people stipulating a process of de-development/de-growth or development in reverse.[13] In this sense, the thesis looks at political and economic transformations through the lenses of governmental policy that aims at promoting these transformations and how changes in policy and its implementation determine socio-economic development.[14]

[12] Structural change is usually defined in terms of changing use of natural resources, demographic transition, changing social characteristic of the population (i.e. in health, education, urbanization), shifts in economic structures and related changes of technology and employment patterns and development of institutional and legal framework.

[13] Some of the countries that have experienced significant decline in economy and living standards include ex-Soviet and Yugoslav countries in the 1990s, Iraq during the Gulf wars (1980-88, 1990-91) and subsequent international embargo, Lebanon during the civil war (1975-1990), China during the Great Leap Forward and Cultural Revolution.

[14] It is not only explicit change in the economic or social policy of the government that affects socio-economic development but also other actions of the government that may play a significant role. E.g., open hostility with other nation(s) takes a toll on the economy and population as resources are diverted

The problem with transformations as understood above is that they cannot be easily scientifically measured since the changes are of qualitative rather than quantitative character. Therefore, only the accompanying phenomena such as economic growth, literacy or life expectancy can be measured.

4.1.5. Reform

Reform refers to a change in government policy. In this thesis, it is used mostly in relation to the economy and society that results in a political and economic transformation as described above. It is obvious that the actual results of reforms may differ from their stated goals. This thesis looks at how reforms and related transformations affect socio-economic development in the case countries.

4.2.Selected Development Indicators and their Significance

Measuring development is not an easy task. First, there is the crucial problem of defining, what constitutes development as it has been already pointed out. Second, there is the problem of selecting appropriate indicators (while necessarily excluding others) and third, the problem of data availability.

Economic development cannot be measured simply by per capita growth of GDP and other criteria have to be selected as there is no linear equation between national income and welfare of the society. With socio-economic development, the situation becomes even more complex. It is not possible to use a single indicator. Therefore, from early 1970s scholars started looking for alternative measures of development including but not limited to some or all of the following: life expectancy, political rights, including rights of women, health and environmental sustainability. Thus, multidimensional approach to measuring development based on using several indicators has emerged (Komlos et Snowdon, 2005).

In order to allow for an easy and quick comparison between countries aggregate indices started to appear. The composition of such indices is rarely without criticism as they have to be limited to few sub-indicators making them insufficiently inclusive off all aspects of development. For example, the HDI excludes factors like political freedoms, human rights, or sustainability.

On the other hand, if composite indices are more inclusive, their construction becomes too complex as they contain a large number of indicators, which cannot be

to the army, and lives and property (capital) are destroyed during military operations; similarly, a rogue foreign policy may cause international sanctions, which obstruct trade.

easily collected, and the process of calculation is difficult. An example is the Index of Sustainable Economic Welfare (ISEW), which was designed as an economic indicator in parallel to GDP. Unlike the GDP, which merely sums economic output, the ISEW discounts pollution, depreciation of natural capital, degradation of the environment or income inequality while it includes unpaid housework or capital formation. In total, ISEW adds or subtracts nineteen categories from the GDP in order to make it more reflective of the welfare of the society (Friends of the Earth). The complexity of the methodology means that by 2000, more than ten years after the creation of the index in 1989, it had been counted only for eight countries (for more see Neumayer, 2000).

Criticism also relates to what weight each indicator takes in the final calculation. For example, the HDI has three dimensions of equal weight – a long and healthy life, education, and a decent standard of living. The inclusion of the GDP per capita as a measure of material quality of life (even though there is not necessarily a linear causality between the two) means that there is a relatively high correlation between the HDI and GDP, somewhat defeating the original premise of the HDI, which was to complement if not to replace GDP (cf. McGillivray, 1991).

Inevitably, there is a certain level of arbitrariness inherent to the aggregate indices. They all depend on the prejudices of their authors, who select and valuate the sub-indicators and construct the method of calculation in accordance with their understanding of development.

Beyond the question of arbitrary selection and valuation of indicators, there is also a practical problem with using composite indices to assess the impact of political and economic transformations on socio-economic development. None of those composite indices extends much beyond recent history and hence do not cover the focus period of these thesis (e.g. the HDI extends only to 1980). In addition, the datasets underlying these indices are largely incomplete as they cover certain years only, which often differ among the countries. As a result, effective cross-comparison and systematic observations of the trends are rather impractical. Thus, for the purpose of this thesis it is necessary to collect independent indicators that would cover most of the focus period while originating from the same source. This approach of using multiple indicators will also allow assessing the relation between policy and different dimensions of development rather than making a global assessment of development based on a single aggregate indicator.

The Human Development Index has been probably the most widely accepted and most often used aggregate measure of human development since its inception in 1990. The components of the index are real income per capita adjusted according to purchasing power, longevity as measured (prior to 2010) by life expectancy at birth, and educational attainment measured by the adult literacy rate and the combined gross primary, secondary and tertiary enrolment ratio (UNDPb). The analysis of socio-economic development in this thesis shall follow the same dimensions, i.e. economy, health of the population, and education. However, due to concerns for data availability (as it has already been mentioned, the HDI does not extend beyond 1980) it was mostly not possible to use the data available through HDI from UNDP and alternative sources had to be sought.

In addition to GDP per capita, life expectancy, literacy and mean/expected years of schooling as inspired by the HDI, some other indicators are included, namely inflation, and gender equality. Inflation is a good indicator of immediate economic situation and it will complement GDP per capita in measuring the economic performance of the countries. Gender equality – as measured by the gap between literacy and school enrollment ratios, life expectation of women and men, and participation of women in labor force – plays a particularly important role in the region of broader Middle East. The exclusion of women from equal access to education, healthcare or paid employment (arguably one of the highest in the world)[15] that is considered the cause of the overall human development lagging behind income levels in the region (UNDPc).

The dimensions of development that are regrettably not included in this thesis are sustainability, environmental degradation, democracy, respect for human rights and good governance. Such areas are of rather qualitative character while easily quantifiable indicators have been preferred due to the limited scope of the thesis. Another issue was again the problem of data availability. Nevertheless, the above-mentioned areas of development may be at least indirectly included in the analysis. Good governance manifests in the quality of life or economic growth. Similarly, the lack of representative government or of respect for human rights is likely to cause social unrest, uprisings or armed conflict that will necessarily affect the economy or

[15] See World Atlas of Gender Equality in Education, UNESCO, 2013.

living standard. The Arab Spring[16] ongoing at the time of the writing of this thesis is a good proof to that. Sustainability and environmental pollution show in the life expectancy as factors such as air pollution in big cities or unavailability of safe drinking water increase mortality rates.

4.2.1. Economy

4.2.1.1. Gross Domestic Product and Economic Growth

According to Maddison, the unprecedented growth in GDP in per capita terms in the 20th century was the precondition that allowed greater material wealth of people when compared to their ancestors, this is most visible in the developed countries, but is valid also for most developing countries (2001). The improvement in material wealth as measured by GDP per capita is also a necessary precondition for improvement in other aspects of human life. Anand and Sen stress the role economic growth plays in human development as it increases incomes for the people and government, who can spend them on better diet, housing, healthcare services, education facilities, sanitation infrastructure, which then translates into longer and healthier life, or improved literacy (2000).

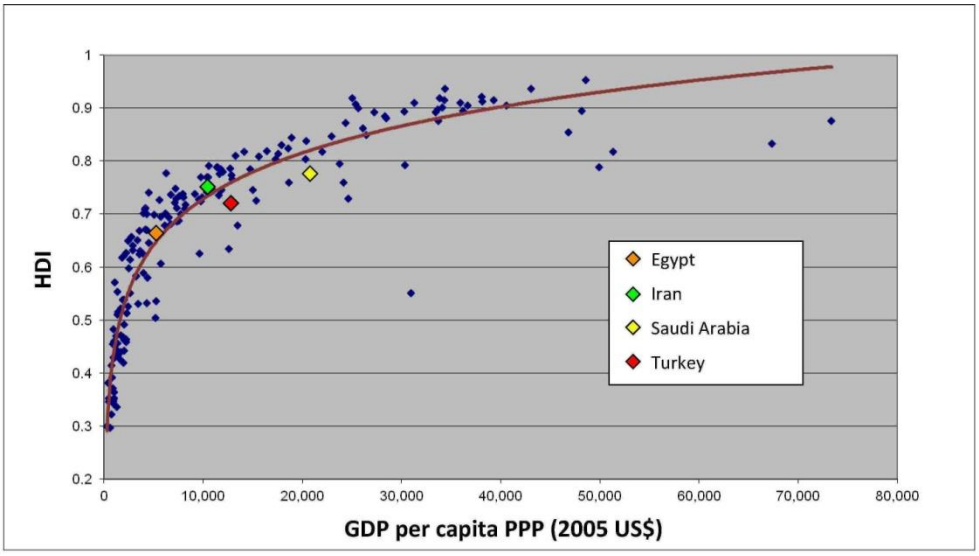
It has already been argued that economic growth without an accompanying structural change of economy, policy and society does not foster major improvement in human development. However, the opposite holds also true as human development without an underlying increase in production of wealth or productivity is very unlikely.[17] That is why there is such a high correlation between HDI and GDP (see Figure 7 or Annex). The occasional discrepancies between GDP and human development as measured by HDI highlight the importance of government policy beyond mere promotion of economic growth – some countries do better or worse in translating economic growth into better quality of life than others do. Thus, this thesis will attempt to analyze what is the role of government policy in harnessing economic growth into socio-economic development. Depending on the approach, the GDP is measured either as i. the sum of private consumption, gross investment, government

[16] A period that started with large anti-government protest across the Middle East in the spring of 2011 and lead to the fall of the authoritarian regimes in Tunisia, Egypt, Libya and Yemen and to the civil war in Syria.

[17] Countries like Cuba, or the Indian state of Kerala present a rather puzzling experience as their adult literacy, life expectancy, infant mortality, and birth rates are comparable to developed countries significantly above their income levels. It is debated to what extent it is possible or even desirable to replicate their development models (cf. Tharamangalam, 2006; Glennie, 2011; Ranis and Kosack, 2004)

expenditure, and the balance of export and import, ii. the market value of all final goods and services, or iii. the sum of incomes of all individuals within a country (Taylor, 2007). The result is the aggregate output of goods and services within a country during a given period. The annual percentage change of real gross domestic product then represents *economic growth*. In order to account for the difference in the size of population between different countries, the GDP is often given in per capita terms (i.e. aggregate production per one inhabitant). Similarly, economic growth can be also measured as the growth of GDP per capita rather than of total GDP.[18]

Figure 7 Correlation between HDI and GDP (2011)



Source: UNDPd

4.2.1.2. Inflation

Inflation refers to the increasing prices of goods and services during a given period of time. Its result is the depreciation of currency, when each unit can purchase lesser amount of goods and services within a country/economy. The annual percentage change of prices (mostly of a given set of products and services – so called market basket) is conveyed by an inflation rate. The situation when inflation rate is negative and prices are falling is called deflation.

Inflation is a useful tool in measuring economic performance and government policy as high inflation is not only one of the symptoms of an ailing economy but often also its cause as governments fail in their economic/monetary policies. High or

[18] In many developing countries economy may grow as a whole, but at a slower rate than the population, resulting in negative economic growth in per capita terms.

unpredictable inflation is a sign of economic vulnerability to shocks (e.g. commodity price shocks) and it is detrimental to economic growth as it discourages personal savings and investment, and reduces growth of productivity (Dowd, 1994). Hyperinflation, the extreme situation when inflation surpasses 50% per month (i.e. more than 100-fold increase in prices per year; Wood) then impedes exchange of goods and services in the economy, prevents efficient planning, causes a breakdown of the banking and financial system and spurs rapid capital flight (Reinhart and Savastano, 2003). Money loses its value and stops being a medium of exchange.

A parallel phenomenon to (hyper)inflation is a quick depreciation of the currency on international markets, which causes problems with balance of payments limiting imports. On the level of individuals, inflation means increasing prices of consumer items including food. If it is not offset by an increase in real wages, people can afford to buy less, reducing their material standard of living. Many of the case countries experienced such problems facing severe foreign account deficits while the people had to cope with declining purchasing power.

Although there has been no period of hyperinflation in the region during the focus period, some of the countries, have experienced prolonged periods of high inflation signifying major economic issues. It will be interesting to see how government policy influenced the inflation rates in the case countries changing the fortunes of the economy and people.

4.2.2. Health

As the HDI suggests, the ability to live long and healthy life is a key element of human development. The World Health Organization stresses out the role health plays in economic development as '*healthy populations live longer, are more productive, and save more*' (WHOa). As Barke and O'Hare explain, poor health and chronic illness of an individual cause low productivity, which leads to low income. The resulting poverty then limits an individual's ability to afford proper diet and healthcare, which perpetuates poor health, closing a vicious circle (1991).

It is a crucial aspect of government policy to improve the health of the population in order to promote socio-economic development. However, the policy cannot focus solely on increasing access to health services and improving their quality. Beyond the absence of preventive healthcare and treatment, poverty underlies high sickness rates in developing countries. The causality is illustrated by Dodd and

Munck, who designate poverty as the origin of ill-health. Poverty deprives people of proper housing, drinking water or improved sanitation, causes hunger and malnutrition and forces people into hazardous jobs. In addition, lack of education means people do not have sufficient information how to avoid health risks through better hygiene or nutrition (2002). Thus, the approach to health cannot be but multidimensional just as the approach to development in general needs to be; the various aspects of development are mutually reinforcing. This is again shown in the thesis, which identifies poverty as the leading cause of slow socio-economic development in some countries.

4.2.2.1. Life expectancy at birth

Life expectancy is the number of years a person can expect to live at a given age assuming that mortality rates specific for that age will not change (OECD). For international comparison (e.g. in the HDI), life expectancy at birth is used most frequently.

Life expectancy relates to the fulfillment of several physical needs and as such can be considered an aggregate indicator of quality of life. Sufficient nutrition, basic education, access to clean water, basic housing (protection from the elements), and availability of healthcare assistance translate into higher life expectancy (Hicks and Streeten, 1979). In addition, life expectancy reflects also other factors that contribute to higher mortality like stress, obesity, alcohol consumption or environmental pollution (Sen, 1998). In developing countries, life expectancy is distorted by high child mortality, which means that life expectancy at birth is significantly lower that life expectancy at later age – persons who reach certain age (between 5-21) can expect to live on average longer than those aged zero to five.

4.2.2.2. Child mortality

Child mortality, often also described as under-five mortality, expresses the share of children who are not likely to survive their fourth year of life based on the prevailing age-specific mortality rates. According to the World Health Organization, child mortality indicates the level of country's healthcare and per se of development in general (WHOb). As such, it is also included in the Millennium Development Goals, which among other goals aim to '*reduce by two thirds, between 1990 and 2015, the under-five mortality rate*' (Goal 4 – Target 4A). Hanmer, Lensink and

White argue that the differences in under-five mortality in countries with similar income relate to government policy. Poverty, inequality, women's education, family planning (and per se fertility rate) and access to health services (prenatal care, qualified medical assistance at delivery, pediatrics) all play an important role (Rutstein, 2000). This makes child mortality of interest to this thesis as an indicator of the influence of policy on welfare.

4.2.3. Education

Education is considered a fundamental right (as stipulated by the 1948 Universal Declaration of Human Rights, Art. 26) and governments across the world as well as non-governmental organizations see it as a key factor of economic development. According to the World Bank, education contributes to higher productivity and technological innovation, raising both individuals and communities from poverty. As such, education allows improvements of other aspects of human life (e.g. health and material standard; WB, 1999). This view is corroborated by empirical research, which establishes a strong correlation between growing spending on education and the educational achievement of the population on one hand and economic growth on the other. In addition, education has been identified as one of the vectors of structural change from agricultural, to industrial and knowledge society (cf. Miller, 2007; Stevenson and Weale, 2003). The exact causality between education and economic development is often debated (what came first), but it remains undisputed that long-term development without improvements in the education of the people is not possible. Even the oil-rich countries that have based their development model on high oil revenues continue to face problems in various other aspects of socio-economic development, partly because of their lagging performance in education (Karl, 2004).[19]

There is a clear link between governmental policy and education. Governments play most important if not exclusive role in ensuring access of its citizens to education[20] as they provide schools, staff them and determine the curricula.

[19] Some of the greatest discrepancies between GDP and HDI are observed in the Persian Gulf countries and other oil-exporting countries. For example, Qatar, UAE, and Kuwait ranked second, third and fourth globally in terms of GDP per capita PPP in 2011 while in terms of HDI they ranked 34th, 38th and 51st. Similarly, Oman and Bahrain ranked 35th and 38th in GDP compared to 81st and 46th in HDI (UNDPd). For all MENA countries see Annex 6.

[20] With the exception of Lebanon, primary and secondary education in the broader Middle East is dominated by state institutions (WB, 1999).

4.2.3.1. Adult literacy rate

Literacy in its narrow understanding refers to the individual's ability to read and write and thus convey and receive messages about everyday's life experience in written form (UNESCO, 2006; OECDb). Adult literacy rate is then the percentage of adults (i.e. people aged at least 15 years) who are literate in accordance with the definition above. A common way of measuring literacy is through household surveys, direct assessment tests or by counting all people who have received formal education (Terryn). It is obvious from the narrow definition of literacy and the methods used for measuring it that it is a rather deficient indicator of education.

In its broad understanding literacy has grown to encompass a variety of other skills (e.g. including critical reading, information technology competency) that are crucial to increase employment opportunities in current times (UNESCO, 2006). Another issue is that of youth literacy (i.e. of people less than 15 years old), which due to the high increase in school enrollment in many developing countries is higher than in older cohorts. As such, adult literacy rate cannot convey the most recent improvements in the provision of education. From the point when near universal literacy for younger cohorts is reached the adult literacy rate starts reflecting the mortality of older people among whom there is high prevalence of illiteracy rather than tangible change in the literacy of the population. Still, from among indicators of education the literacy rates spans the largest part of the focus period of this thesis and will be used.

4.2.3.2. Mean and expected years of schooling

In order not to assess merely the number of people who have received some school instruction (and can be thus considered literate) but to consider also the extent of education *mean years of education* are used. This indicator represents the average length of schooling adults over 25 years of age have absolved at a given point (UNDPe). *Expected years of schooling* then indicate the most recent development in education as they give the number of years a child entering first year of elementary school can expect to absolve if the prevailing patterns of school enrollment do not change (UNDPf). Both of these secondary indicators cover the period 1980-2010.

4.2.4. Gender Equality

In the region of broader Middle East women have been subjected to discrimination in education, healthcare and employment based on their traditional role of wives and child-takers. In many countries, the unequal status of women has been codified by the legal system, particularly in areas such as personal status, child custody, divorce, and ownership of assets. Further, religious conservatism mandates the exclusion of women from public life as manifested by forced segregation of sexes, limitations on women's travel or prescribed dress code in some of the societies. Regrettably, government policy has been often conforming to (if not actively promoting) traditional gender biases discouraging women's emancipation to the detriment of development.

4.2.4.1. Education – Literacy Gap and School Enrollment Ratio

Education plays a crucial role in the framework of gender equality as it provides women with some of the capabilities that are necessary to increase their participation in the public life as well as affecting a positive change in their quality of life (e.g. health, employment). This view is confirmed by the UNESCO, which views gender parity in education[21] as the first step towards gender equality and greater participation of women in the social, political and economic life of their communities and countries as well as towards a higher income and social mobility (UNESCO, 2012). The World Bank goes as far as to credit improving the education of girls and women as '*the single most important investment a developing country can make'* (p. 3, 1999).

Increasing women's education not only helps to strengthen the labor market and reduce poverty, but also contributes towards lower fertility, child mortality, better nutrition of the population, and higher educational achievements of children (ibid.). In short, the improvement of women's educational attainment contributes towards the socio-economic development of the whole society.

Besides the role of family in preventing girls' parity in education (e.g. when girls are expected to marry young, and thus have no incentive to complete their secondary education or continue to university), it is also government policies, which strongly influence the accessibility of education to girls. Especially in the context of

[21] The MDGs set as its goal to '*eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015*' (Target 3A).

conservative countries in the broader Middle East, governments need to provide sufficient number of girl's schools and female educators as schools are mostly or exclusively gender segregated.[22] In an attempt to extend the opportunities of higher education to women, some of the countries have been establishing female-only colleges in order to avoid the stigma of mixing sexes in public (WB, 1999).

As a measure of gender policies in education, the gap between *adult literacy rate* of men and women (i.e. the difference in percentage points) is assessed. The *school enrollment ratio* of boys and girls (i.e. the percentage of females to males enrolled at a given educational level) is used as a secondary indicator to complement the data.

4.2.4.2. Health – Life Expectancy at Birth and Maternal Mortality

In general, women tend to live six to eight years longer then men (WHOc) due to behavioral – higher consumption of harmful substances such as tobacco or alcohol or higher mortality from injuries in men – and natural reasons. However, this difference in life expectancy is reduced in several countries by gender inequality – discrimination in access to health services and education, early marriage, absence of family planning (and related higher fertility rates), domestic violence, female genital mutilation and longer working hours (e.g. in domestic or agricultural work) are some of the factors that increase women's mortality (WHO, 2009). A particular area, which directly reflects status of women in access to healthcare (and indirectly education and family income) is the mortality of women in reproductive age that is particularly high in developing countries. The cause is the *maternal mortality*. That is the number of women who die during pregnancy and childbirth (usually given per number of births).[23] This makes maternal mortality into a useful indicator of the status of women and is used in this thesis.

Beyond poverty caused by the loss of income, the ill-health of women has also other effects on human development – the WHO report on non-communicable diseases in women and development mentions increased child mortality, worsened diet, higher school dropout rate and child labor as well as loss of assets. Chronically

[22] Tunisia and Turkey are some of the countries in the region, where schools run by state are predominantly coeducational.

[23] The MDGs set as its goal to 'reduce by three quarters, between 1990 and 2015, the maternal mortality ratio' (Target5 A).

ill women are also at a higher risk of being divorced or left by their husbands increasing economic stress on women and children (NCD Alliance, 2011).

The abovementioned factors limiting women's health can be significantly altered by government policy aiming at improving women's status not only in health services but also in other areas such as education and legal protection, with a positive impact on socio-economic development. As such, women's health can be considered a sort of compounded indicator of gender equity.

In this thesis, women's health is measured by the gap *between life expectancy at birth* of men and women and *maternal mortality* (from 1990 only).

4.2.4.3. Participation of Women in the Labor Force

The participation of women in the labor force can be seen as a key measure of gender policies in the region. From all regions of the World, the broader Middle East has the lowest share of working women. According to the Millennium Development Goals Report from 2011, only 20% of women in North Africa and Western Asia[24] have a salaried job (outside agriculture; UN, 2011). An accompanying factor is the economic dependency ratio (i.e. the number of non-working people who are dependent on one working person), which is also the highest in the world (WB, 2004).

The exclusion of women from work in public has a tremendous impact on economic development of the affected countries. Amidst growing unemployment and stagnating real wages across much of the region in the last thirty years, continued gender inequity has meant that an increasing number of people have been dependent on a languishing income, reducing the economic welfare of the society (ibid). Beyond the perpetuation of poverty, low participation of women in the labor force, also means that poor families lack resources that could be otherwise spent on education and health of the family (and of children in first place) compromising future socio-economic development in the affected countries. It also needs to be stressed that low employment rate as much as inequality in access to education or health services limits women's capability to decide about their own lives and to participate in making decisions concerning their communities (in line with the fundamental understanding of human development as increasing one's choices).

[24] Note that the UN defines the region slightly differently from this thesis, including the Caucasus while excluding Iran and Mauritania.

Women's labor participation rate, that is the percentage of women aged over 15 years with paid jobs, is measured. Only data from 1990 and later is available.

To conclude some of the above-mentioned researches on gender disparity, it shall be said that women's empowerment is the single most crucial aspect in promoting socio-economic growth of the broader Middle East.[25] It is the area where the region sees its highest disadvantage when compared with other regions of the world and that is why gender equality. It shall be interesting to see to what extent is this development paradigm reflected by the policies of the case countries.

4.3. A Note on Data Availability and Accuracy

It needs to be acknowledged that there is a lack of coherent and verifiable statistics. This is particularly true for the first part of the focus period (1950s-1970s), when information is scant or not available at all, even from the statistical bureaus of the respective countries. This has to be understood within the development context of the countries as for the early period even data like population statistics is merely estimation. Simply no official records exist for that period. In other areas, such as economic data, statistics is recorded only much later into the focus period. In other cases, local data is available only from the statistical offices as hard copies. It was outside of the capacity of the author to travel to those countries to collect the data. Thus, resources other than the statistical bureaus had to be used (e.g. the Maddison dataset for historical GDP values).

For some indicators, especially those that are used as benchmarks in the Millennium Development Goals (e.g. maternal mortality, women's labor participation rate), data has not been collected until late 1980s. Even though such indicators cover the changing trends in socio-economic development in the case countries only partially, they are indispensable to the purpose of this thesis.

[25] This is, an area where most improvement can be reached with significant spill-over effect to other aspects of socio-economic development, such as education, health and material wealth.

4.4. Historical Background

In order to allow a deeper understanding of the socio-economic changes that took place in the case countries and the broader region of the Middle East during the focus period it is necessary to provide historical background. The knowledge of the domestic and international events will make it possible to understand the motives behind the formulation of governmental policies as well as the impacts of their implementation. It will also help in differentiating between external (e.g. wars, global economic crises) and internal dynamics (i.e. changes policies), which underpin the changes in the selected socio-economic indicators. However, it is given that both international and external factors of development tend to be closely interconnected. Based on these historical reviews, major changes in the political and economic systems of the focus countries can be anticipated and later matched with trends in the selected indicators of socio-economic development. Obviously, many changes crucial to the development of the case countries took place before the beginning of the focus period in 1950 and need to be included in the historical background. Also, the foreign domination and attempts of the Middle Eastern countries to modernize during the 19th century is not dissimilar to events during the 20th century.

4.4.1. Egypt

In 1517, Ottoman troops conquered Cairo ending Egyptian independence[26] forestalling centuries of foreign domination not only of Egypt, but also of the Middle East, which was for the first time since the rise of Islam to be ruled from a non-Arab capital, namely Istanbul (Rogan, 2009).

Amidst progressing decline in the authority of the Ottomans over their Arab possessions, the French led by Napoleon invaded Egypt in 1798 (Daley, 1998). The newly appointed Ottoman governor Muhammad Ali then used the chaos to usurp the rule over Egypt for himself and to establish a hereditary rule, which prevailed until 1952, when his great great-grandson, the last Egyptian king, Farouk I was deposed. A period of modernization started under Muhammad Ali with Egypt borrowing European technologies and forging economic relations with European powers (Sayyid-Marsot, 1984). However, the modernization of the country came at a heavy price, as the import of technology and construction of infrastructure required large

[26] Although Egypt had been ruled by the Mamluks, a foreign class originating from slave soldiers serving the previous Arab rulers of Egypt, the country was independent.

amounts of money that could not be raised through taxation but had to be borrowed from European creditors (Rogan, 2009).

In many cases, projects like new industries, irrigation channels and most importantly the Suez Canal turned barely profitable, not contributing towards the repayment of the debts their construction incurred. Similar development occurred also in other countries of the Middle East, where growing indebtedness of the countries and dependence on European creditors helped the European governments to expand their colonial domain over the region.

In 1878, the European debtors represented by their governments forced a kind of receivership on Egypt, with European experts controlling the government (above all budget and tax collection) and key sectors of the economy.[27] The attempt to raise funds to service the debt lead to a massive introduction of cash crops, mostly cotton for export to European markets, altering Egyptian agriculture from subsistence farming to growing commodities for export (ibid).

The growing popular discontent over foreign dominance and high taxation (partly to repay the debts) led to an armed rebellion in 1882 that had to be put down by a British invasion and consequent military presence that lasted until 1956 (Daly, 1998). In 1914, the formal suzerainty of the Ottoman sultan, who was siding with the Germans against the British in the World War, was forcefully ended and Egypt was declared a British protectorate, formalizing British colonization (Sayyid-Marsot, 2007). After massive protests and attacks on British soldiers during a national revolution in 1919 Britain finally agreed to recognize Egyptian independence in 1922. However, the Empire remained in control of the Suez Canal zone and Sudan (which had been until then part of Egypt), perpetuating the popular dislike of the British and the king, who was seen by the Egyptians as a puppet of the British and an obstacle to the restoration of constitutional government (Rogan, 2009).

The position of the monarchy became untenable following a failed Egyptian invasion of Palestine that aimed to secure the interests of Palestinian Arabs in 1948. Egyptian forces were defeated and routed by Israeli fighters, who secured the creation of the Jewish state and humiliated Arab armies. In 1952, the monarchy was toppled in a coup by the Free Officers Movement, starting a period of major social and economic

[27] Similarly, Tunisian government came under the control of a committee appointed by foreign creditors in 1869 and the country became a French protectorate twelve years later (Borowiec, 1998).

changes (Sayyid-Marsot, 2007). The new government under the leadership of Gamal Abdel Nasser started sweeping reforms including regulation of imports, rapid industrialization, introduction of price controls and subsidies, guaranteed employment for high school and university graduates, limiting role of religion in education and judiciary, and land reform (Gelvin, 2008). Such goals were only attainable through large-scale nationalization of assets, starting the building of Arab socialism.

An important aspect of the Nasserist revolution was the redistribution of large land holdings belonging to absentee landlords among the peasants, which in line with state programs for the availability of fertilizers and irrigation meant significant rise in yields (IBRD, 1959). However, the side effect of these land reforms has been a profound reduction in the size of the farms. The extreme scarcity of arable land in Egypt and its division through inheritance over 40 years since the reform means that most farm are economically unviable (WB, 1992).[28] In addition, Egypt became the main promoter of Arab unity and initiated several (failed) unification effort forming the United Arab Republic with Syria, which was united with Yemen in a confederation known as United Arab States (1958-1961; Sayyid-Morsot, 2007).

The events in Egypt have to be seen in the context of the region, where Arab nationalism was on the rise since the end of the 19th century. An independent Arab state was sought in the Arab domain of the Ottoman Empire based on Arab nationality and language, rather than on Islam, which was the binding principle of the Ottoman state. After the Entente France and Britain used the Arab national aspirations in the fight against the Ottomans who fought along the Central Powers during the World War, and consequently divided the Arab lands as a spoil of the war to the great disappointment of the Arab nationalists, there was a growing discontent at the continuation of foreign dominance. Arab nationalists called for an Arab unity and the overthrow of reactionary Arab governments that were friendly to the colonial powers (Rogan, 2009).

Against this backdrop, Egyptian revolution became one of the outcomes and propagators of the contemporary change in the Arab world. The example of the Egyptian Free Officers was soon followed by army officers in Iraq (1958), Syria

[28] Only 3.5% of the total landmass in Egypt is arable, some of the smallest value globally. The land reform of the 1950s has caused high fragmentation of land ownership and most farms are less than 2 feddans (i.e. 8,400 sq m; WB, 1992). The land hunger was ameliorated only little by the expansion of arable land through irrigation allowed by the Aswan High Dam.

(1960), and later Libya (1969; Hourani, 2010). These newly established regimes sought to create their version of Arab socialism based on Nasserist Egypt. In order to secure the technology, funds and weaponry to ensure security and progress, these countries much like Egypt turned to the Soviet Union, the only logical partner considering American reservations towards left-leaning governments and support for Israel (Rogan, 2009).

In Egypt, Nasser negotiated the departure of the British troops in 1956 and nationalized the Suez Canal to finance the construction of the High Aswan Dam, after he had been declined assistance by the United States. A subsequent invasion by Israel, Britain and France to retake the Canal failed due to the international pressure and Egypt was reassured of its political and economic model for modernization of the country (Sayyid-Marsot, 2007).

In order to rally Arab masses behind the case of Arab unity, Nasser escalated the conflict with the Jewish state gaining much popular support in the Arab street while unsettling many Arab governments. However, the humiliating defeat in a surprise Israeli invasion in 1967 and the subsequent loss of territory and closure of the Suez Canal prompted the demise of Arab socialism in Egypt (Daly, 1998). After Nasser's death in 1970, his successor in the presidential office Anwar Sadat faced growing popular unrest and an ailing economy with economic liberalization, islamization of the society, and a rapprochement with the West and Israel. After showing Egypt's military proves in the October war in 1973, when Egypt recaptured parts of the Sinai Peninsula, Sadat expelled Soviet experts, started economic reforms known as Infitah (Arabic for opening) and signed a peace deal with Israel in 1979, gaining back the Sinai and substantial aid from the United States (Sayyid-Marsot, 2007). Despite his reputation as a reformer in the West, Sadat saw dwindling support at home due to the continued persecution of the opposition, growing food prices, and widespread corruption (cf. CBS News).

After the assassination of Sadat, his successor Hosni Mubarak continued the policies of partial liberalization of the economy (structural adjustment under a strong pressure from the IMF and WB as Egypt was near to default on its debt in 1991), while maintaining high food and fuel subsidies as well as continued repression of the dissent (Daly, 1998). By such means, autocracy in Egypt prevailed under the rule of Mubarak for another three decades.

In 2011, the Egyptians inspired by the happenings in other Arab countries revolted against their government, which in their perception was responsible for the lack of representation and economic problems (high unemployment and prevalence of poverty), and deposed Hosni Mubarak and his clique after close to 30 years in power. Because of the 'Arab Spring' Egypt saw its first democratic elections since the deposing of the king in 1955.[29] With glitches and amidst street violence the process of democratization continues. The effects of this transition on the economy, welfare of the people and development in Egypt and the broader Middle East remains to be seen.

4.4.2. Iran

The 19th century in Iran/Persia was marked by internal political turmoil, the opening of the isolated country to western influence and growing rivalry of Russia and Britain over dominating Persia. Likely, this 'great game' between the two world powers prevented the colonization of the country as Persian rulers were trying to play off the colonial powers and to modernize the country.[30] Nevertheless, as in the case of other case countries, the efforts to protect Persian sovereignty and to modernize the country were successful only partially.

The loss of territory, dependence on foreign borrowing, and selling of concessions to foreigners stirred up a constitutional revolution and a civil war in 1905-1911 (Daniel, 2012). Despite the establishment of a constitutional monarchy, the country was divided into British and Russian spheres of influence in 1907 and later occupied by both, allegedly to prevent chaos vis-à-vis the fight between the king and the constitutionalists (Avery, Hambly and Melville, 1991). In reality, the occupation should be seen in the context of the discovery of oil in Persia in 1908. Persia then became the main supplier of oil to British navy (Rogan, 2009).

The occupation lasted until 1921, when the ruling Qajar dynasty was overthrown, much of Iran brought under the control of Reza Khan (who later in 1925

[29] During the so-called Arab Spring, mass protests led to a significant turmoil in the region and to the fall of long established regimes in Tunisia, Libya, Egypt and Yemen, while elsewhere the protests were brutally suppressed (e.g. Saudi Arabia, Bahrain) or erupted into a civil war (Syria).

[30] The 19th century in the area of Southern and Central Asia was characterized by a competition between the Russian and British empires for the territory, which had not been yet colonized. Russia was gaining territory in Central Asia and Britain was solidifying its rule in India and the Persian Gulf. It was Britain's fear that Russia if it gained access to the Indian ocean, would thwart British efforts to create a land bridge from the Mediterranean to the Indian Subcontinent (Fromkin, 1980)

founded the Pahlavi dynasty) and the Persian Soviet Socialist Republic[31] disbanded (Daniel, 2012). Under the strong rule of the new Reza Shah Pahlavi, comprehensive modernization of the country started. The reforms included unification of the educational system, construction of roads and railroads, and establishment of industrial factories. Quite controversially and similarly to the mimicking of Western social habits in Turkey under Ataturk, Reza Shah obliged people to wear Western dress and banned Islamic veil for women. The Shah intended to modernize not only the country, but its people too (Avery, Hambly and Melville, 1991). In a move signifying a break with the past, the country asked to be internationally addressed as Iran (local name of the country), rather than Persia, the historical name of the country used in the West since ancient Greece (Daniel, 2012).

The reform era ended in 1941 as Soviets and British (later joined by US troops) occupied Iran and deposed the Shah in favor of his son Mohammed Reza in order to prevent an alliance between Iran and Nazi Germany (Miron, 1981). The experience of the colonial era together with the occupation during World War II gave a rise to new efforts to limit foreign influence in Iran and curb the power of the king. In 1951, Mohammad Mossaddegh was appointed a prime minister by the parliament. Besides far-reaching social reforms, including introduction of social security (e.g. unemployment, sickness benefits), state control of land, and protection of land tenants' rights (cf. Gasiorowski and Byrne, 2004; Constantino, 2004), the PM initiated the nationalization of the Anglo-Iranian Oil Company. This happened after talks to increase royalties paid to the Iranian government by the oil company had failed. While Saudi Arabia was receiving 50% of the profits generated by the selling of her oil, Iran was gaining only 17.5% of the profits (Kinzer, 2003). The nationalization sparked an international embargo of Iranian oil and a naval blockade of Iranian coast by the British navy. The ensued domestic economic and political crisis persuaded the Shah to dismiss Mossaddegh, however a popular revolt in support of the prime minister forced Mohammed Reza to flee the country. It was only after a military coup sponsored by the CIA and MI6 that the Shah could have returned,

[31] In the wake of communist revolution in Russia, the British tried to use Persia to mount an intervention to defeat the Bolsheviks. In response, Russia orchestrated the establishment of the Soviet Republic of Gilan in northwestern Iran to counterbalance British aims. It was only after Russian and Britain reached an agreement that both countries withdrew their troops and all Iranian territory could be restored to a rule by the central government (Rezun, 1981).

resulting in the imprisonment of Mossaddegh and his allies (Daniel, 2012; Avery, Hambly and Melville, 1991). In addition, the oil industry was restored to foreign ownership, although 50% of the profits were newly ascribed to Iran. However, the government had no access to the books of the oil consortium and no Iranians held managerial positions (Kinzer, 2003).

In 1963, the Shah motivated by his wishes to modernize the country and to build a new power base for his rule started a 15-year reform program known as the White Revolution (Ansari, 2001). These reform included redistributing arable land to small farmers, privatizing state run industries and further developing them through subsidies to their owners, as well as modernizing and expanding education (while limiting religious influence in it) and emancipating women through suffrage and new marriage law (Ramazani, 1974). Despite significant improvements in the quality of life in terms of education, health services and infrastructure, the reforms increased inequality as land was not distributed equally and industrial subsidies benefited only factory owners excluding a large segment of the Iranian population from the benefits of the economic boom Iran was experiencing in the early 1970s (Abrahamian, 2008).

During the White Revolution, Mohammed Reza Shah already disliked for the coup in 1953, the extravagance of the court,[32] and the autocracy of his government[33] had to rely increasingly on the army and secret service to suppress a growing opposition to his policies and rule. With growing violence in the streets and nation-wide strikes coinciding with a sharp economic crisis (1977/1978) the Shah assented to democratization of the country at the end of 1978 (Avery, Hambly and Melville, 1991). When he left for medical treatment abroad in January of 1979, a revolution began. Under the command of Ayatollah Khomeini, the most vocal critic of the regime, who had returned to the country from a forced exile just few days after the departure of the Shah, armed protesters started taking over governmental institutions (Abrahamian, 2008). Within months, the monarchy was dissolved and a new constitution declaring an Islamic republic introduced with Khomeini as the supreme leader.

[32] In 1971, the Shah organized a $200m celebration of 2,500 years of Iranian statehood (Arte TV). Later, the Shah introduced a new calendar starting with the conquest of Babylon by Cyrus the Great replacing the previous Islamic calendar. Overnight, the year changed from 1355 to 2535 (IRDC).

[33] For example, in 1975 all political parties were merged into a single pro-Shah party all Iranians had to be members of (Abrahamian, 2008).

What followed the Islamic revolution was a consolidation of power of the clerical regime with imprisonment and executions of opponents (from the rank of ancient régime officials or recent pro-democracy activists), and nationalization of the economy in a new command system (ibid).[34] At the same time, the country was facing a growing international hostility including the freezing of Iranian foreign assets and a trade embargo imposed by the United States following a hostage crisis, when US diplomats were hold captive by Iranian Revolutionary Guards. In 1980, neighboring Iraq invaded Iran. The widespread backing in form of financial and military aid the Western and Arab governments provided to Iraq in a hope for the overthrow of the Iranian regime allowed the war to last for eight years (Ansari, 2003). The result was a rapid decline of Iranian economic output and a decline in the quality of life of the population due to the economic mismanagement and war related damages to the oil fields and shipping in the Persian Gulf that hampered the extraction and export of oil.

The death of the supreme leader Khomeini in 1989 and the need to reconstruct the country after ten years of political unrest and warfare motivated liberalization of the economy, including reduction of state control, privatization and deregulation of the market, foreign trade and investment, as well a political rapprochement with the West. Thus, the 1990s brought a period of relative stability and economic recovery (Abrahamian, 2008; Ansari, 2003).

The liberalization of the society and economy ended after the 9/11 terrorist attacks on the United States. The US president designated Iran as a member of an 'axis of evil' prompting a new era of conflict between Iran and the United States.[35] As Iran stepped up its nuclear enrichment program and development of ballistic missiles and lent support to anti-American guerillas in Iraq in order to deter a potential American invasion or attempts to overthrow the Islamic regime, the economic sanctions against the country have been tightened. The peak of the sanctions was the imposition of an oil embargo by the European Union in 2012, which severely limited Iranian export revenues prompting rapid devaluation of the Iranian Riyal and high inflation. On the domestic level, the regime increased its repression of the opposition

[34] The regime called for an overthrow of capitalism and imperialism presenting itself as the voice of the unheard and oppressed not only of Iran but of the whole world (Abrahamian, 2008).

[35] According to Bush, the countries of the axis of evil (Iran, Iraq, and North Korea) seek weapons of mass destruction, possibly arm and fund terrorists and thus pose a threat to the US, her allies and global peace (Bush, 2002).

culminating in allegedly rigged presidential elections in 2009 and a violent suppression of the ensuing protests.

In essence, the modern era in Iranian history can be defined by the tensions between conflicting trends of modernization, westernization, religious conservatism and attempts to keep Iran free from foreign dominance. The results of this tension include revolutions/coups, radical social, political and economic reforms and much of turmoil.

4.4.3. Saudi Arabia

The history of the present Saudi state can be dated from 1744, when the founder of the Saudi dynasty Mohammad bin Saud formed an alliance with the radical Muslim cleric Muhammad Ibn Abd al-Wahhab (Al-Rasheed, 2002). This alliance has become a formative feature of political life of the country much like the later discovery of oil has become a determining factor of the economy. Ibn Wahhab and later his followers have provided the ruling Sauds with a sanctification of the territorial expansion of his rule at the cost of the Ottoman lands on the Arab Peninsula governed by local Arab chiefs, as all Muslims except the followers of Ibn Wahab were considered infidels and needed to be (re)converted to Islam (Rogan, 2009).[36] In exchange, the Wahabists have been given prominent posts in the Saudi monarchy and an almost total control over public life in the country. By such means, it was possible for the Saudis to conquer most of the Arab Peninsula, including the two holy cities Mecca and Medina in 1920s, and to declare the modern state of Saudi Arabia in 1932 (Al-Rasheed, 2002).

This alliance was prevented from breaking despite numerous cracks that have appeared during the course of the 20th century. Following the rapid modernization of the country and the influx of foreigners since the 1950s, the resentment of religious conservatives towards the regime has grown rapidly. This era peaked in the takeover of the Holy Mosque at Mecca in 1979 by armed Islamists demanding the expulsion of foreigners from the country and severing oil exports to the United States (Wright, 2006). More recently, the Saudi regime faced the wrath of Islamists after the Saudi kingdom allowed the deployment of 'infidel' American troops in the country to fend

[36] Wahabbism strives to reproduce the life of the prophet Muhammad and his companions refuting all allegedly later additions to the belief, such as veneration of saints, tombs, Sufi mysticism, etc., which are considered as idolatry.

off a potential Iraqi invasion in 1990. Many of the radicals then called for the overthrow of the monarchy, and executed terrorist attacks against foreigners and state officials in the country (Al-Rasheed, 2002).

The Saudi royal family averted the wrath of the radicals as the monarchy supported the export of Wahabism by funding religious schools, mosques in other Muslim countries, or by supporting the mujahidin in a variety of countries – Algeria, Afghanistan, Bosnia, Chechnya and most recently also in Libya and Syria.[37] On the domestic scene, the continuation of the alliance helps to silence any opposition to the regime or calls for reform under the guise of protecting the religion. According to the strictest interpretations of Islam, elected governments or laws made by humans contravene God's full sovereignty over humans. The incorporation of the clerics into the state bureaucracy prevents them from criticizing the ruling family, its excessive amassment of wealth and its economic and military alliance with non-Muslims.

The result is an extreme rigidity of the political and partly economic system. The lack of accountability of the government towards the people is shown by the absence of elections. Only municipal elections have been hold on separate occasions, most recently in 2006 and 2011 (Aljazeera). Another feature of the Saudi system is the exclusion of women, whose freedom of movement, education, property rights or employment are severely limited. This affects negatively their participation in the labor market or public life and per se development of the country.

In terms of political economy, the fortunes of the country are bound to the global prices of oil. From the beginning of commercial oil exploitation in Saudi Arabia in 1941, the country was getting only minor share of the revenues. By the end of 1940s, the American consortium drilling and exporting Saudi oil gained 75% of the revenues and even the American government was earning through taxation more off the Saudi oil than Saudi Arabia itself (Rogan, 2009). Already in 1950, Saudi Arabia renegotiated the deal to gain 50% of the revenues (Kinzer, 2003). Despite the creation of an oil cartel, the Organization of Petroleum Exporting Countries (OPEC) at the initiation of Saudi Arabia in 1960, it was not until 1971 that the oil companies consented to giving 55% of the revenues to the Saudi government. In 1973, Saudi Arabia and other Arab countries deployed an oil embargo on Israeli allies to aid the

[37] The mujahedin are fighters who combat enemies of Islam, e.g. Russians in Afghanistan and Chechnya, Serbs in Bosnia, secular governments in Islamic countries.

Egyptian and Syrian efforts to regain lost Arab territories during the so-called October war. Besides causing a sudden hike in oil prices, the oil embargo also spelled the end of foreign companies' domination of oil exploitation as governments buoyed by the extra oil revenues set out on buying out western oil concessions. By 1980s, the Saudi oil industry was fully state-owned (Rogan, 2009). The downside of the success of the embargo was the consequent oil glut in the 1980s. The global economic slowdown spurred by the energy crisis of the 1970s caused the oil prices to plummet, bringing serious economic troubles to many oil-exporting countries, including Saudi Arabia, which had to cope with austerity throughout the 1980s and 1990s.

4.4.4. Turkey

Since the end of the 17th century, the Ottoman Empire saw a steady decline as the country was lagging behind Europe in technology and administration. This meant its economic and military power diminished and the Empire started losing territory to the Habsburgs, newly independent Balkan states, and Russia.

The growing weakness of the central government contributed to the rise of local pashas in the Arab lands, which often meant the loss of effective if not nominal control over the Arab lands (e.g in Egypt. Following the growing threat of colonization of the country, sweeping reforms, the so-called Tanzimat, were introduced in 1839 (Rogan, 2009). The Tanzimat enforced a new system of taxation and administration, universal conscription, secular schooling, introduced legal codes modeled after European examples, and made all the subjects of the Sultan equal regardless of ethnicity and religion. The reforms were aimed to strengthen the central government, to catch up with Europe, and to prevent the rise of national movements in the various parts of the Empire. Eventually, the reforms lead to the introduction of a constitution in 1876 (Agoston and Masters, 2009).

Despite the reform efforts, the decline of the Empire continued and foreign dominance grew as debts incurred to finance new infrastructure, modern army and bureaucracy accumulated. In 1875, the Ottoman Empire defaulted on its debt and in 1881 the Ottoman Public Debt Administration was created to oversee the repayments (Rogan, 2009). Because of this arrangement, tax collection, investment and other Ottoman expenditures were handed over to foreign powers. It was not until 1954 that the Ottoman public debt was repaid (Agoston and Masters, 2009).

The constant loss of territories and a stream of refugees pouring into the Anatolian heartland of the empire since 1870s and the domination of the economy by non-Muslims, either foreign creditors or Ottoman Christians and Jews led to a growing anger against the colonial powers threatening the Empire. This meant that the Ottomans joined the World War on the side of the Central Powers fighting Britain, France and Russia (Mango, 2004). The subsequent defeat in the war resulted in the occupation of Turkish territory. Non-Turkish parts of the Empire were transferred under the control of colonial powers, while Asia Minor was according to the Treaty of Sevres (1920) meant to be divided among Britain, France, Italy, Greece, Armenia and possibly the Kurds, effectively limiting Turkish state to central Anatolia and the Black Sea coast (Wagner, 2004).

It was only after the success of the Turkish war for independence between 1920-1922 that the foreign troops were expelled from Asia Minor and international recognition of Turkey gained in the Treaty of Lausanne (1923; Agoston and Masters, 2009). At the same time, the Ottoman Empire was dissolved under the leadership of Mustafa Kemala, later called Ataturk ('father of the Turks'). The sultan was deposed, the caliphate abolished[38] while a new national assembly and a secular republic were established, setting up the modern Turkish state (Mango, 2004).

The universalism of the Ottomans based on ethnic plurality of the Empire and the bond of shared religion, Islam, has been replaced by Turkish nationalism and secularism of the Turkish republic. This process was partly made possible through large scale ethnic cleansing before and during the war as well as the loss of non-Turkish Ottoman lands, which meant that the newborn state was predominantly Turkish (ibid).

The social, political and economic policies of the new Republic were to break with the 'backward' Ottoman past and ensure quick modernization of Turkey, which at that time equaled westernization. The modernization policies included the abolishment of the caliphate, subordination of clergy to the state, giving suffrage to women and making them equal to men in inheritance and marriage,[39] introducing

[38] The caliph represented the religious and political leader of all Muslims representing a formal continuity of Islamic states, caliphates, from the era of the Prophet. Ottoman sultans assumed the title held the tiled from 1517 until its abolishment after the dissolution of the Ottoman Empire in 1924.

[39] According to Islam, women inherit only half of the value of inheritance passed on male relatives and cannot divorce at will. Further, polygamy was prohibited.

European civil and penal code, mixed-gender education and western curricula, while banning religious education (Agoston and Masters, 2009). In the economy, etatism was pursued. In order to make up for missing foreign investments, state established business ventures in industry, agriculture and transportation and grounds for comprehensive import substitution industrialization were laid. The two main cash crops, tobacco and cotton, were to be processed in newly set up Turkish factories rather than exported raw in order to increase export revenues and state land was redistributed to landless peasants in order to promote agricultural development (Hershlag, 1984).

The scope of the reforms and their radicalism is to be appreciated through the following fact: the reforms in Turkey went often beyond mere reform of state or economy, and included attempts to imitate the west in most accepts of life, including social habits and language. European calendar was introduced, traditional dress banned, Arabic in religious liturgy replaced by Turkish. The Turkish language was made unintelligible with Ottoman Turkish as words of Arabic or Persian origin were replaced by words from European languages, by made up words, or spelling was changed to limit resemblance with the original Arab/Persian word (Mango, 2004). So strong was the drive to westernize the country and break up with the Ottoman tradition, which was associated with backwardness.

The era of radical reform lasted until the death of Ataturk in 1938 and introduction of multi-party elections in 1945. As a result of the growing role of the opinion of the masses in government's policy, the reform efforts slowed and some of the most radical changes, such as the ban on the use of Arabic in worship or than ban on religious education in schools, were rescinded (Kasaba, 2008).

The instability of the multi-party system in combination with the rise of religious parties in the post-Ataturk era were the cause of several military interventions into the political life of the country as the military toppled governments and dissolved parliaments presumably to prevent chaos and protect the secular character of the state. Thus, four coup d'états have taken place in Turkey in the last 60 years – in 1960, 1971, 1980, and 1997 (Akgun, 2001). Inevitably, the political instability and coup d'états are interlinked with the highly cyclical nature of Turkish economy during the second half of the 20th century.

The coup of 1960 was a result of a mixture of debt problems, inflation and attempts by the (Democratic Party) government to reverse some of the antireligious laws of the Ataturk era. The continuation of economic troubles towards the end of the 1960s caused a rise of right- and lef-wing extremism amidst omnipresent street violence (Kasaba, 2008). The coup of 1971 and the subsequent period of repression by the government and right-wing guerillas led to further political instability and economic crisis prompting another coup in 1980 (ibid).

In the aftermath of the coup of 1980 all pre-existing parties were banned, chief politicians proscribed from office for ten years, religious or socialist parties outlawed, and a 10% threshold for parliament elections (highest in the world) put in force (Akgun, 2001). The coup of 1980 also put an end to the era of statist development in the economy, as the prime minister appointed by the military Turgut Ozal started under the guidance of IMF and WB a period of trade and investment deregulation. The result was an economic boom during the following decade (Owen and Pamuk, 1998).

A bust followed the boom of the 1980s during the 1990s when Turkey went through several crises. In 1994, the exchange rate of the Turkish Lira collapsed due to the growing indebtedness of the country spelling an economic crisis (Celasun, 1998), which turned into a political problems marked by the rise of ultra-nationalist and religious parties. In 1997, the military 'advised' the ruling religious party (Welfare Party) to resign based on its alleged policy of 'islamization' and subsequently the party was banned in what is described as a 'postmodern coup' (Akgun, 2001). Following the inability of the government to deal with the impacts of a devastating earthquake in 1999, the country's economic and political situation worsened causing the stock market crash of 2001. The subsequent economic recession, deepest since 1945, delivered a landslide victory to a moderate religious party (Justice and Freedom Party of Recep Erdogan; Kasaba, 2008).

Avoiding a fate that befell several previous parties with allegedly religious agenda, the economic success of the government and related mass support helped the Justice and Freedom Party survive attempts for its disbanding by the court and military. In 2010, the Erdogan government appointed new top-commanders and in a referendum, the role of the civilian government in controlling the army was furthered, limiting army involvement in civilian politics. At the same time dozens of army

officers were being prosecuted for participation in an alleged plot to overthrow the government in a military coup (The Economist).

Thus, the process of gradual counter-revolution against the radical reforms and forced secularization of the country succeeded seventy years after the end of Ataturk's presidency. This political shift was also accompanied by a shift in foreign policy with a growing focus on Middle East, former Ottoman lands in particular.

In the era after World War II, the drive for westernization found also a manifestation in attempts to integrate Turkey into Western political, economic and military structures. First, Turkey joined in the European Recovery Program ('Marshall Plan'), later the OEEC (the predecessor of OECD) in 1948, Council of Europe in 1949, and arguably most importantly the NATO in 1952 (Calis, 2012). This process continued well into the second half of the 20th century, as Turkey became a founding member of OSCE in 1974, applied for a full membership of the European Community in 1987 and most lately signed the EU-Turkey Customs Union in 1995. During the 2000s, there have been ongoing negotiations of Turkey's accession to the EU.

Among the case countries and in the region of the broader Middle East, Turkey stands out as the arguably most westernized country in terms of economic and political integration with Europe and North America as well as in terms of domestic legislation. It will be interesting to see, to which extent the more than ninety years of modernization efforts have translated into a higher level of socio-economic development, when compared with the other case countries.

5. Practical Part

In the practical part, a statistical analysis of the selected indicators of socio-economic development for the case countries and where appropriate for the region is conducted. The purpose of this statistical analysis is to identify major shifts in the trends of socio-economic indicators (i.e. decline, stagnation, growth or acceleration, deceleration). Based on those shifts, periods of interest are identified for each country. The subsequent analysis of economic and political systems (based on available studies and reports from relevant institutions) as well as of external influences during the periods of interest determines the role of political and economic transformations in fostering or hampering socio-economic development.

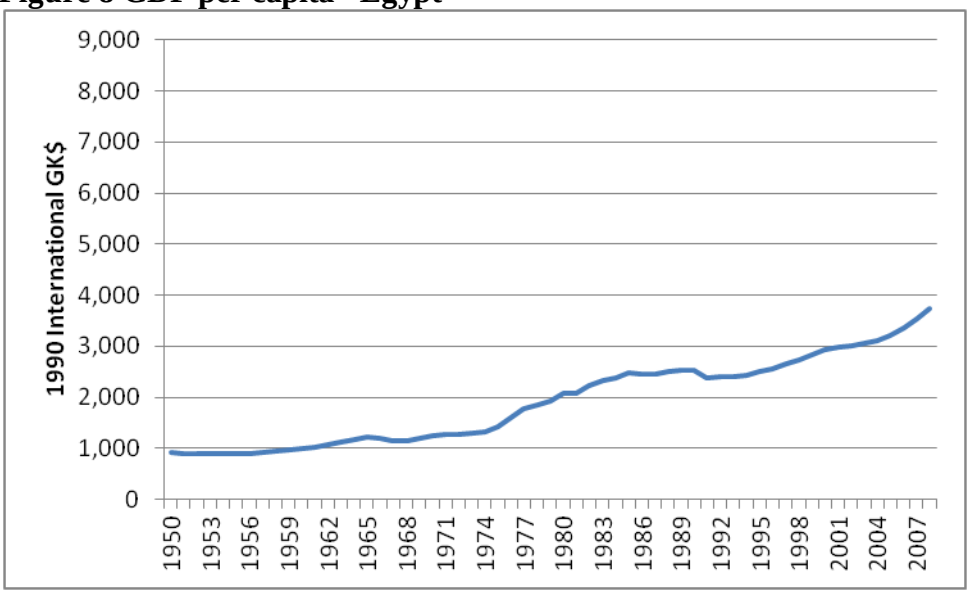
5.1. Data Analysis

5.1.1. Economy

5.1.1.1. Gross Domestic Product and Economic Growth

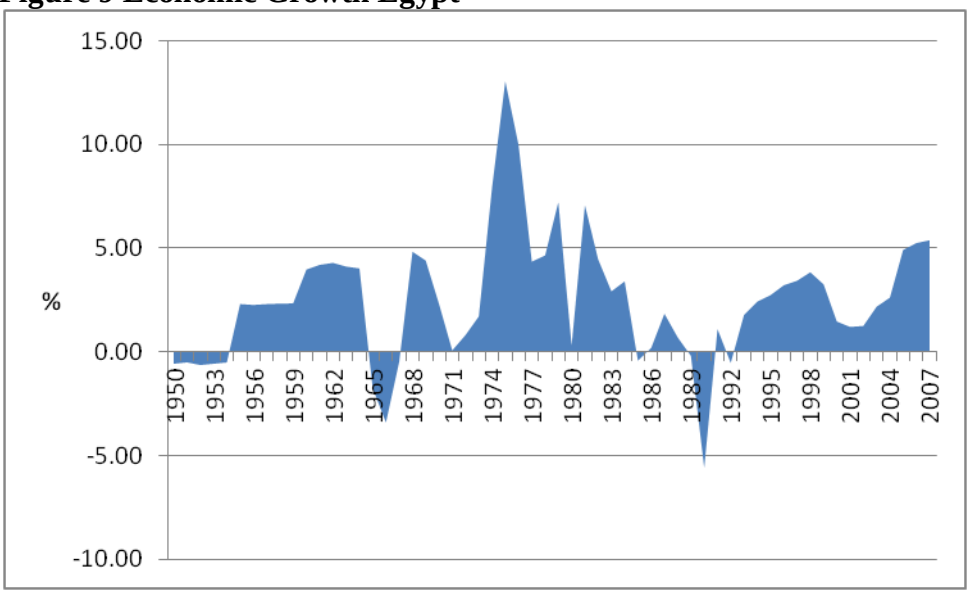
This section shows the development of economic output of the case countries as measured by the GDP in per capita terms and economic growth as measured by the year-to-year percentage change in GDP per capita. Geary-Khamis dollars based on purchasing power parities and average commodity prices are used as a unit of measurement. Both indicators cover the period from 1950 to 2008. The average annual growth rates for five-year periods are also given (Figure 16 and 17). For the underlying data see Annex 3 and 7.

Figure 8 GDP per capita - Egypt



Source: Maddison

Figure 9 Economic Growth Egypt

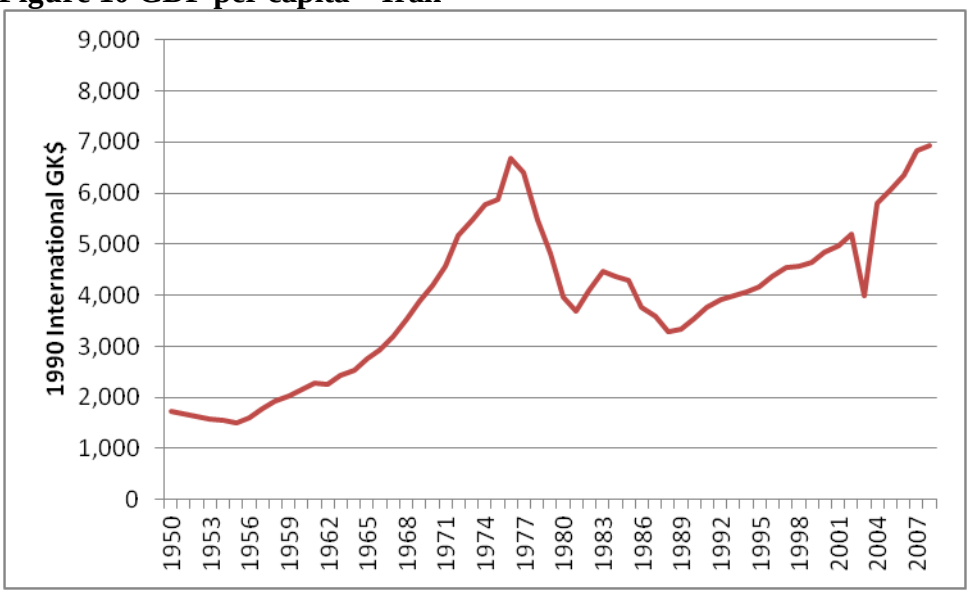


Source: Maddison

In Figure 8 and 9 we can see that the Egyptian economy was in recession during the first five years of the focus period while achieving economic growth in the following ten years (1956-1965) with marked acceleration of growth in 1961. The economy dipped into a 3-year recession in 1966 with highest drop in the output in 1967 coinciding with the Six-Day War. A quick recovery followed (1969-1971) replaced by a slow down at the beginning of the 1970s with zero growth in 1972. Growth began accelerating immediately in 1973 starting a period of economic growth (one can talk of a boom as the growth peaked at 13% in 1976) that lasted until 1985 with the exception of 1981 when the economy stagnated (0.3% growth). From 1983 growth decelerated bringing a period of stagnation with low or negative growth in 1986 that lasted until 1993 reaching a low in 1991 when the economy contracted by five percent. The economic growth picked up in 1994 with an economic expansion lasting until the end of the focus period.[40]

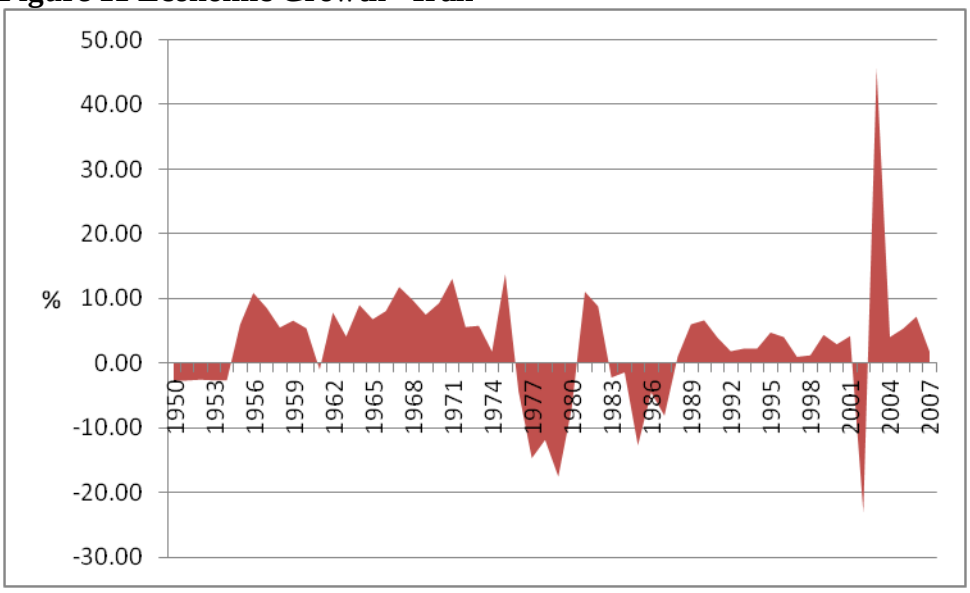
[40] After 2007 when the Maddison data set ends the World Bank indicates continuing economic growth (see Annex 15)

Figure 10 GDP per capita – Iran



Source: Maddison

Figure 11 Economic Growth - Iran



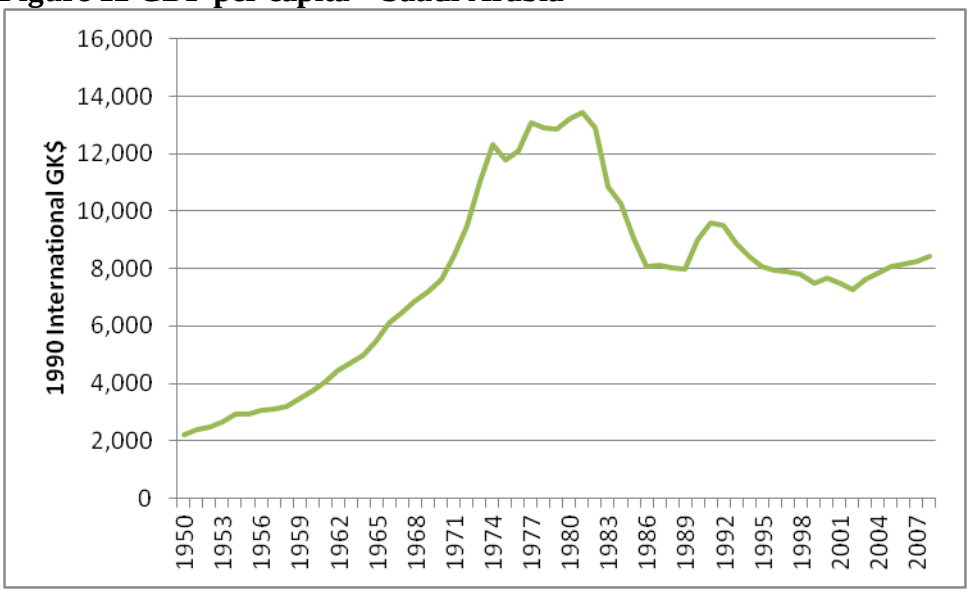
Source: Maddison

As shown in Figure 11, the Iranian economy was in decline from the beginning of the focus period until 1955, which was likely connected to the turmoil surrounding the nationalization of the oil industry and subsequent international embargo on Iran. From 1956, the economy started a period of high growth rates that lasted through the 1960s until 1976 - growth peaked at over 10% in 1957, 1968, 1972 and 1976. During this period, rates lower than 5% were recorded only in 1962 (-0.98),

1964 (4.12%) and 1975 (1.81%). The year after the Iranian economy reached its highest growth (13.75% in 1976) the trend changed quickly as growth rates plunged in 1977 and double digit negative growth rates were recorded from 1978 to 1980. Then, the economy rebounded slightly only to continue decline from 1984 to 1988. These economically turbulent times are bound with two decisive events of recent Iranian revolution, namely the Islamic revolution and the war with neighboring Iraq. When the war ended, the economy started a process of recovery (with growth rates occasionally surpassing 5%). It was only in 2007, that the Iranian GDP per capita surpassed its value from 1977.

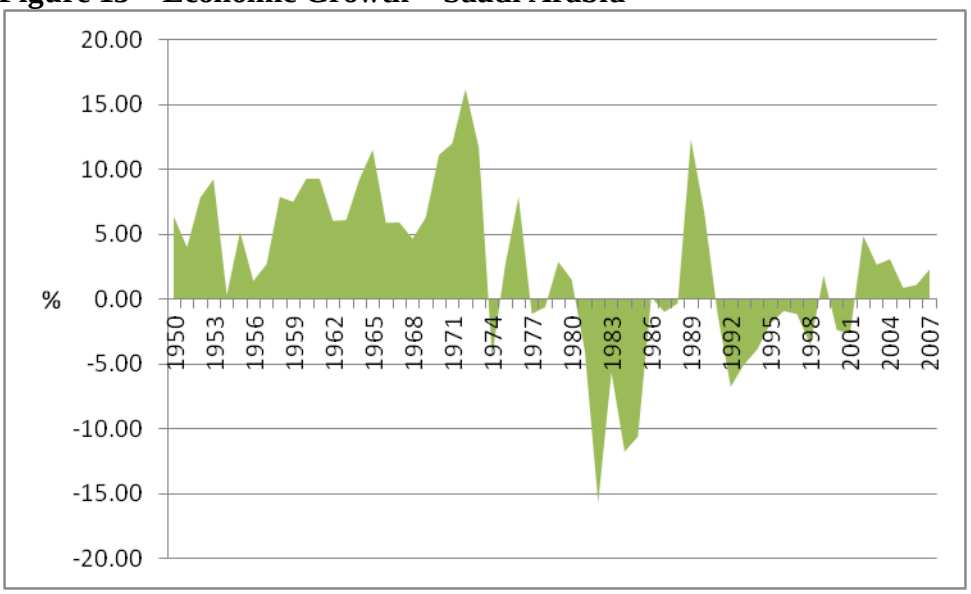
A rather puzzling development is the economic decline of 23% measured in 2003 followed by a 43% growth the year after, wiping out the loss. Other resources (e.g. the World Bank, see Annex 15 for detail) do not record such a development.

Figure 12 GDP per capita – Saudi Arabia



Source: Maddison

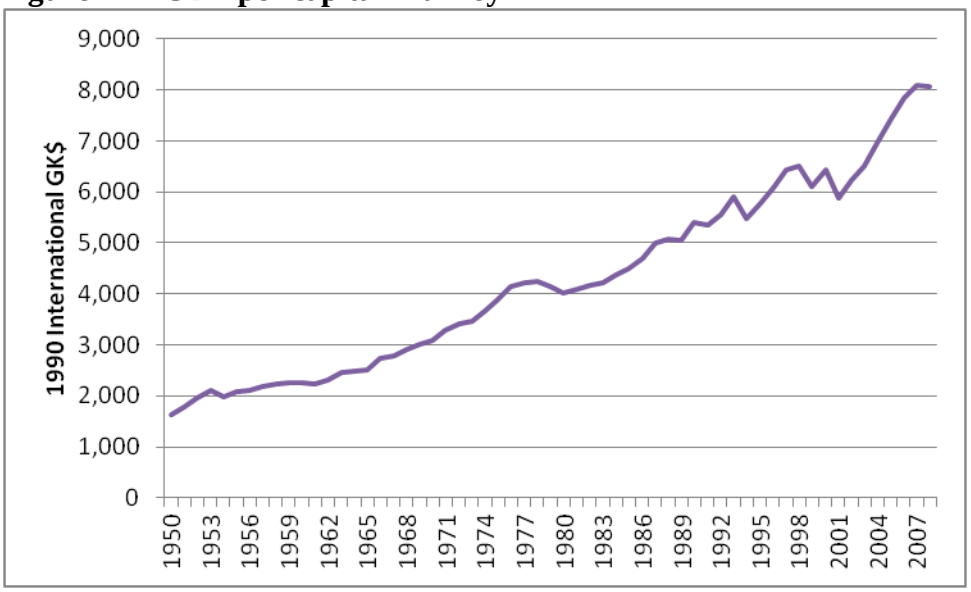
Figure 13 – Economic Growth – Saudi Arabia



Source: Maddison

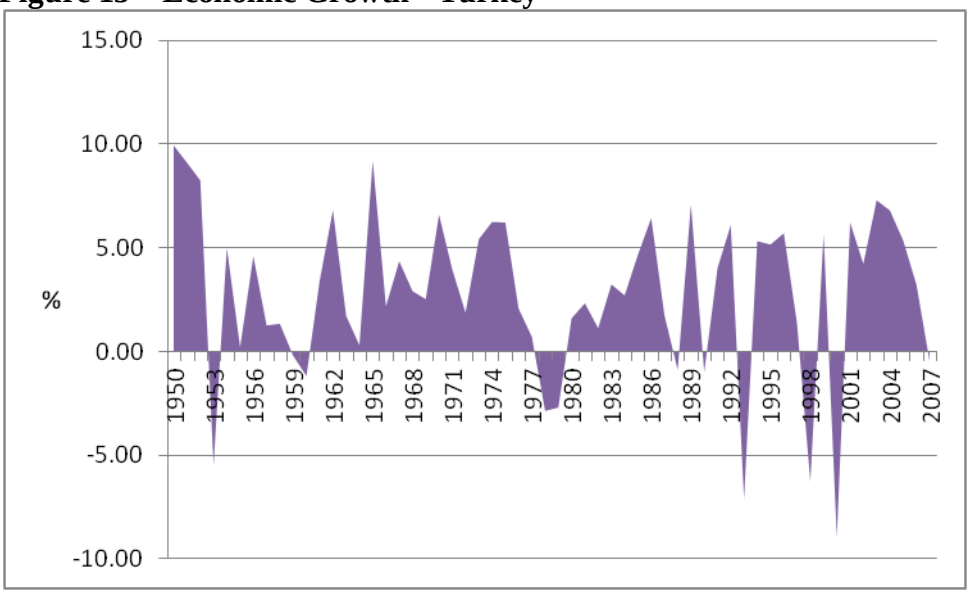
As we can see from Figure 13, the Saudi economy was growing mostly at high rates from the beginning of the focus period until 1977 with only one exception, 1975. After then, there was an era of decline lasting into early 2000s with growth recorded only during two brief periods, 1980/1981 and 1990/91. It was only in 2003 that the economy started a longer period of expansion.

Figure 14 – GDP per capita - Turkey



Source: Maddison

Figure 15 – Economic Growth - Turkey



Source: Maddison

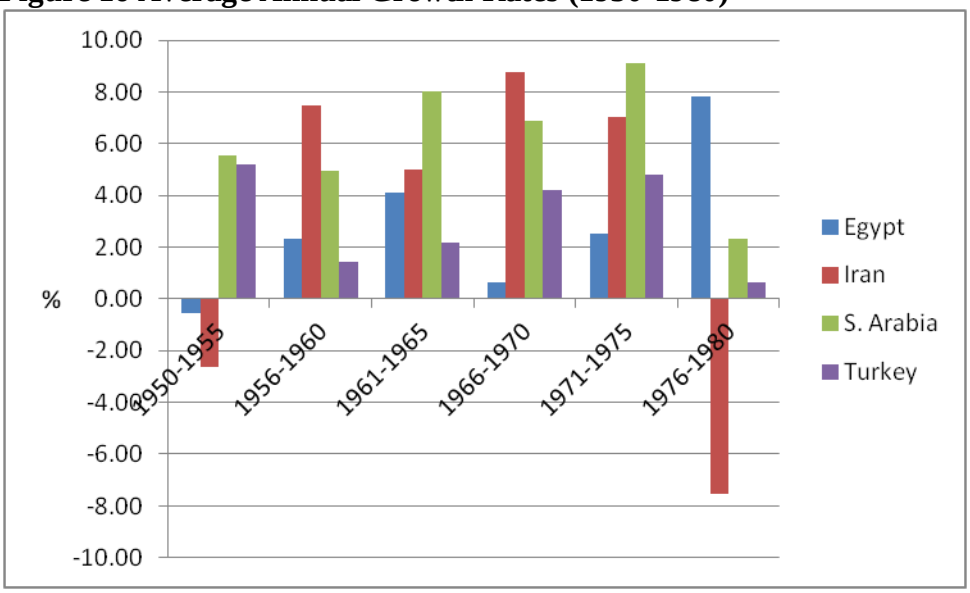
In Turkey, as seen from Figure 15, the focus period began with a rapid economic growth (8 to 10%) lasting until 1954, when the economy declined by more than 5%. Until the end of the 1950s, the economy grew rather slowly. The economy contracted again in 1960 and 1961. A long period of economic expansion followed and Turkey experienced varying growth rates (a peak of 9% in 1966). After two years of contraction (1979 and 1980), the economy had accelerating growth rates until the end of the 1980s. The 1990s were then marked by highly cyclical economy – contraction occurred in 1989, 1991, 1994, 1999, and 2001 (-8%) intersecting periods of rather high growth rates (usually above 5%). The following period of growth was only briefly interrupted by a contraction in 2008, coinciding with the international economic crisis.

The trends in the development of GDP as described above can be further extrapolated for longer periods of time (see Figure 16 and 17 below). In Egypt and Iran, the economy contracted during the first half of the 1950s followed by fast expansion in Iran that lasted until the first half of the 1970s. The second half of 1970s was marked by a deep recession of average decline above 7%. Despite small growth at the beginning of 1980s, the economy continued its decline until the 1990s and 2000s when moderate growth rates were sustained (3-5%). The Egyptian economy

has grown only moderately for most of the focus period experiencing two periods of sustained slowdown in late 1960s and from 1986 to 1995. High growth was experienced only in the late 1970s with the average growth rate approaching 8%.

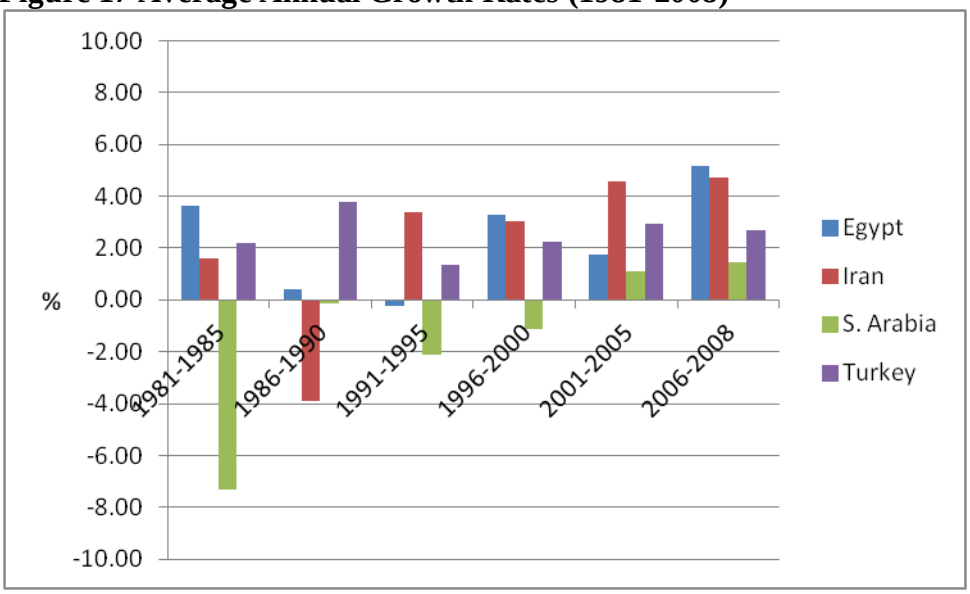
The economic history of Saudi Arabia can be roughly divided into two periods. One of a fast growth accompanying the expansion of oil exploitation during the first half of the focus period (1950-1980) followed by two decades of contraction (1980s and 1990s) and a decade of slow growth (2000s) during the second half. Unlike other case countries, Turkey has not experienced prolonged periods of negative economic growth reaching slow or moderate growth rates as shown by the 5-year averages. The averages however conceal the highly cyclical nature of the Turkish economy.

Figure 16 Average Annual Growth Rates (1950-1980)



Source: Maddison

Figure 17 Average Annual Growth Rates (1981-2008)



Source: Maddison

5.1.1.2. Inflation

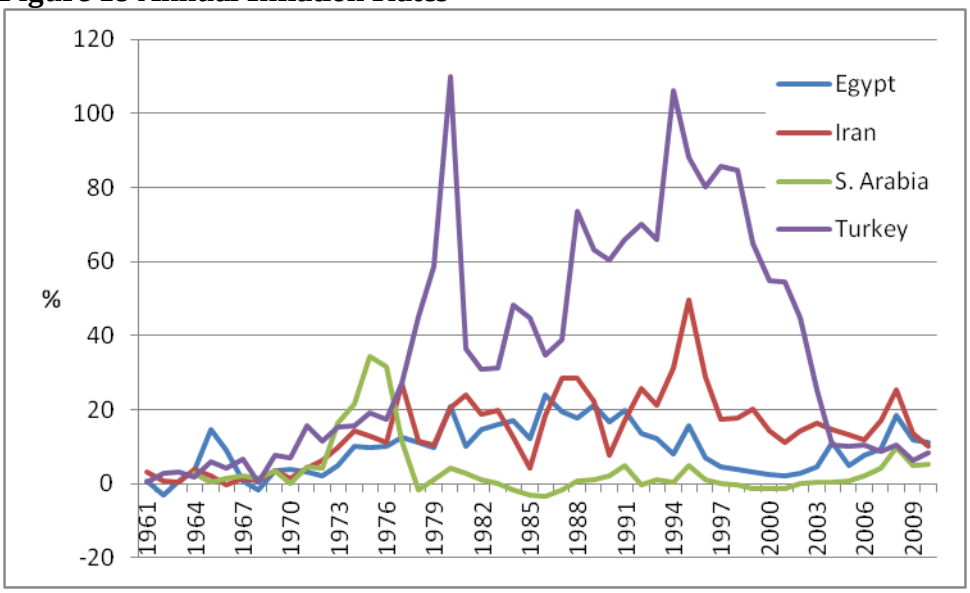
This section covers annual changes in the inflation rate from 1961 to 2010 as measured by the consumer price index. As we can see from Figure 18 (see Annex 8 for detail), the case countries had mostly moderate inflation rates throughout the 1960s with the exception of Egypt, which saw a hike of 14% in 1965. From the begging of the 1970s all of the countries had accelerated inflation rates, which were likely caused by the growing prices of oil during the oil crisis in the aftermath of the 'October War' in 1973. With the onset of the oil glut during the 1980s and later in the 1990s Saudi Arabia experienced very low inflation rates often dipping into deflation coinciding with the falling income of the country. It was only in the mid 2000s that Saudi inflation increased, likely in connection with rising global oil prices. In Egypt, inflation rate oscillated mostly between 10 and 20% (a rate not necessarily high in the context of developing economies) until the beginning of 1990s, when the inflation started decelerating possibly in concurrence with the implementation of a structural adjustment program prescribed by the IMF and WB. Inflation rose again at the end of the 2000s.

In Iran, the inflation rate has not dropped below 10% since 1974 (with the exception of 1985) reaching peaks ranging from 24 to 28% in 1977 (a year of economic turmoil preceding the Islamic revolution), 1981 and 1987/88 (both during the war with Iraq) and of 50% in 1995 (see Annex 8). The latest peak of Iranian

inflation in 2008 (25%) coincided with a partial liberalization of prices and a withdrawal of state subsidies.

From among the case countries, Turkey has seen the highest level of inflation. In 1980, inflation peaked at 110% following a period of economic problems and an army coup. The problems of the country did not subside until the 2000s – inflation did not drop below 30% in any single year while it kept mostly above 60% until 2003 with a peak of 106% during the finance crisis of 1994.

Figure 18 Annual Inflation Rates



Source: WBf

5.1.2. Health

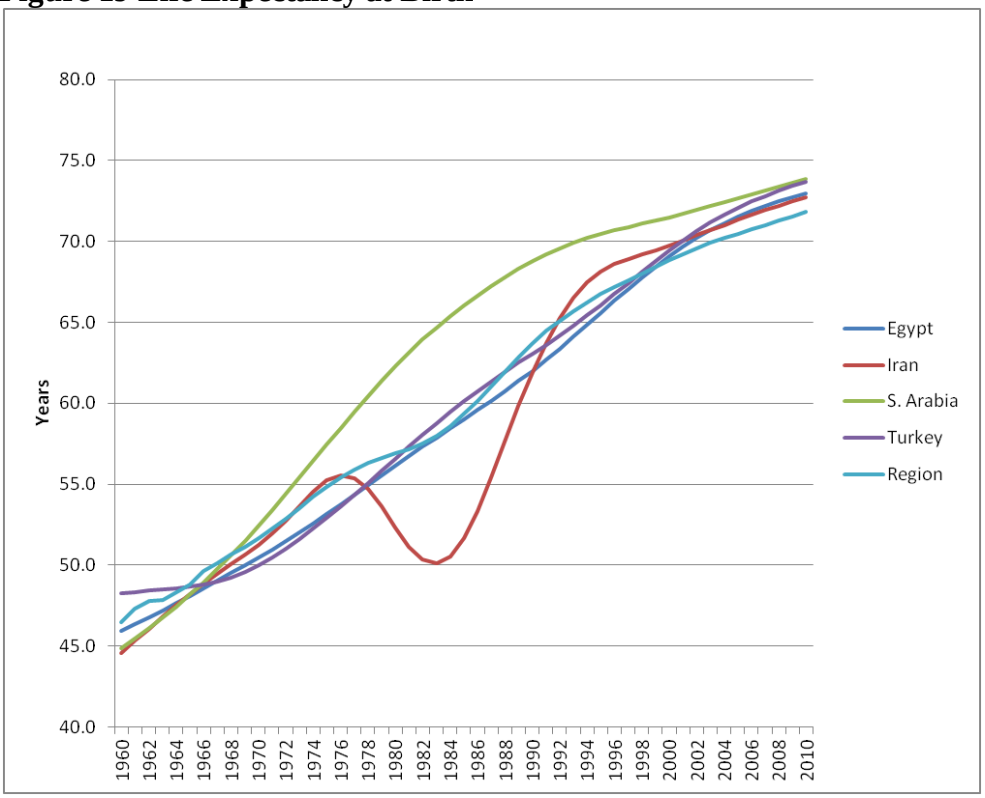
5.1.2.1. Life Expectancy at Birth

In Figure 19 we can see the trends in life expectancy at birth in the case countries during the period from 1960 to 2010 (see Annex 4 for detail). In overall, all countries have experienced significant improvement in the length of life achieving similar results at the end of the period (73-74 years with a gain of 25 to 29 years). Among interesting trends in the chart, it is possible to detect stagnation in Turkey at the beginning of the focus period while other countries were experiencing fast improvement. It was only towards the end of the 1960s that Turkey accelerated the trend. Towards the end of the 1980s, the trend started leveling off in Saudi Arabia and Iran and in late 1990s in the remaining countries. This may have to do more with the

fact that the case countries have approached the contemporary upper value of life expectancy rather than with a change in policy.

The shortening of life expectancy in Iran towards the end of the 1970s and after coincides with the Islamic revolution and subsequent war with Iraq. This view may be confirmed by Figure 30 (ch. 5.2), which shows that the decline in life expectancy was entirely born by males as both of the abovementioned events took a disproportionate toll on men.

Figure 19 Life Expectancy at Birth



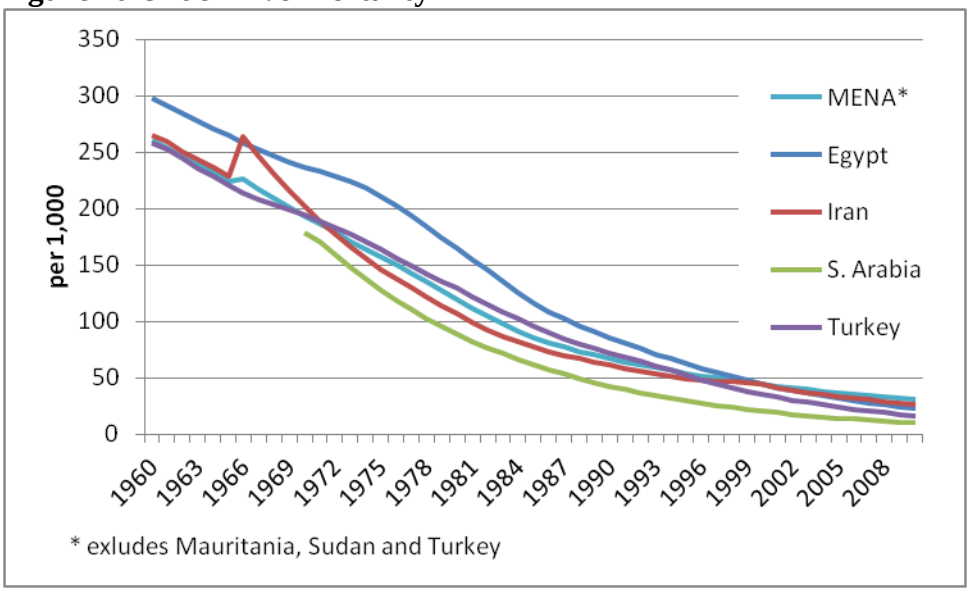
Source: WBe

5.1.2.2. Child Mortality

It is obvious from Figure 20 (see Annex 9 for detail) that all of the case countries have achieved impressive results in reducing under-five mortality of children testifying to the significant improvement of healthcare services and quality of life in the countries. Child mortality dropped from 250-300 deaths per thousand in 1960 to less than 30 in 2010 with Saudi Arabia (10) and Turkey (16) scoring better than Egypt (23) and Iran (26). Although Turkey and Saudi Arabia experienced relatively steady decline in the mortality rate, Egypt and Iran had more varied trends.

Egypt had an accelerated rate of decline from the mid 1970s until mid 1980s catching up with the other case countries. Despite a sudden growth of child mortality in 1966, a quick reduction followed in Iran. From mid 1980s, progress slowed down and the country started lagging behind the remaining countries from mid 1990s ending up with highest under-five mortality rate in the group at the end of the focus period.

Figure 20 Under Five Mortality



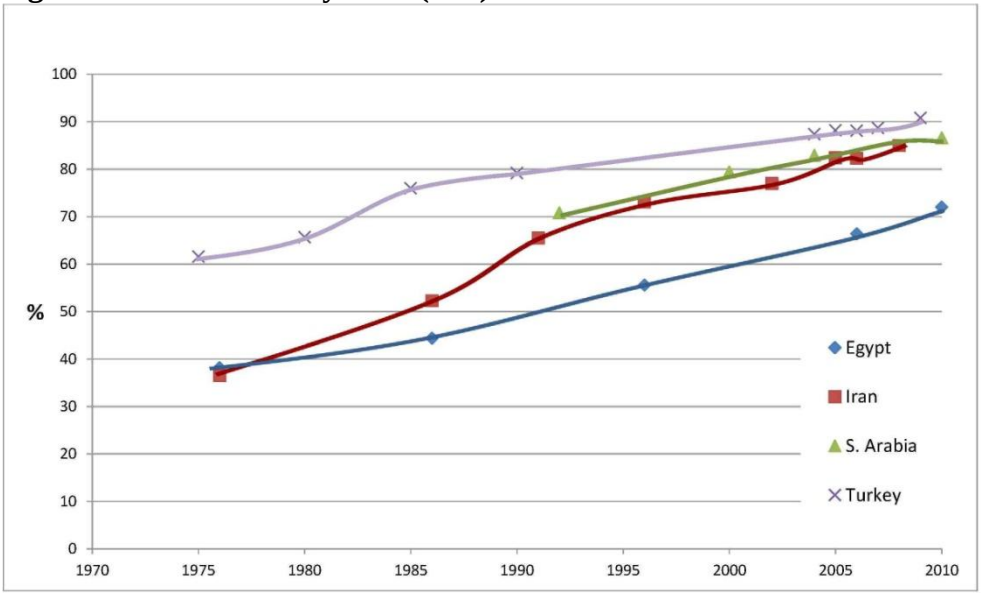
Source: WBg

5.1.3. Education

5.1.3.1. Adult Literacy Rate

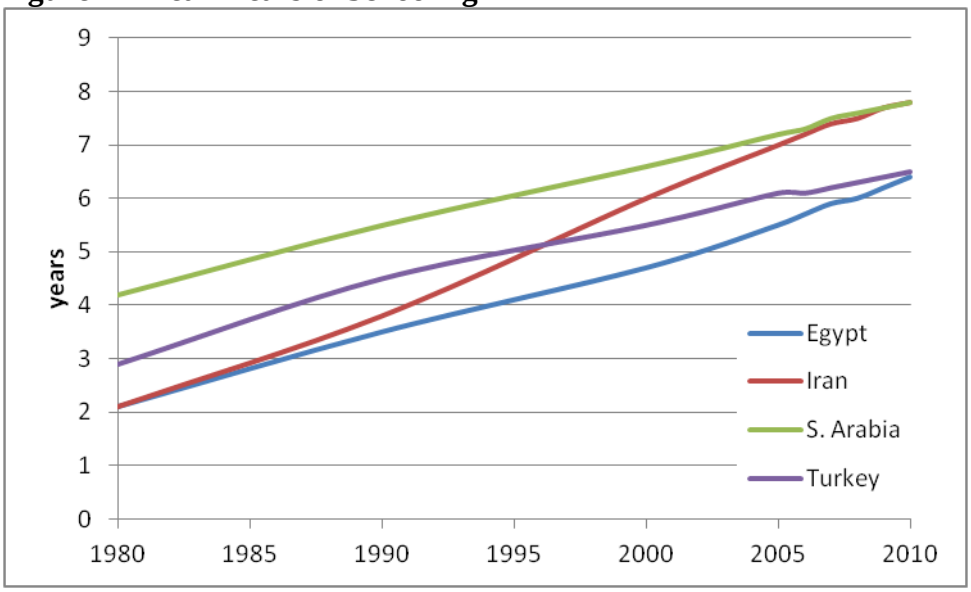
There has been uneven development in literacy rates in the case countries (see Fig. 21, or Annex 10). While Egypt had a steady trend of growth without a major shift (from 38 to 72% in 35 years), Iran experienced accelerated growth of literacy from 1975 until early 1990s. After a period of deceleration in the 1990s, literacy rates improved again in the 2000s. Because of faster increase in literacy, Iran outperformed Egypt by more than 10 percentage points despite having lower literacy at the beginning of the measurement period. For Saudi Arabia, the data is available only from 1992 and indicates steady improvement. In Turkey, literacy had its highest increase from 1980 to 1985 (above 10 percentage points), after which the improvement has been less pronounced.

Figure 21 Adult Literacy Rate (15+)



Source: UIS

Figure 22 Mean Years of Schooling



Source: UNDPe

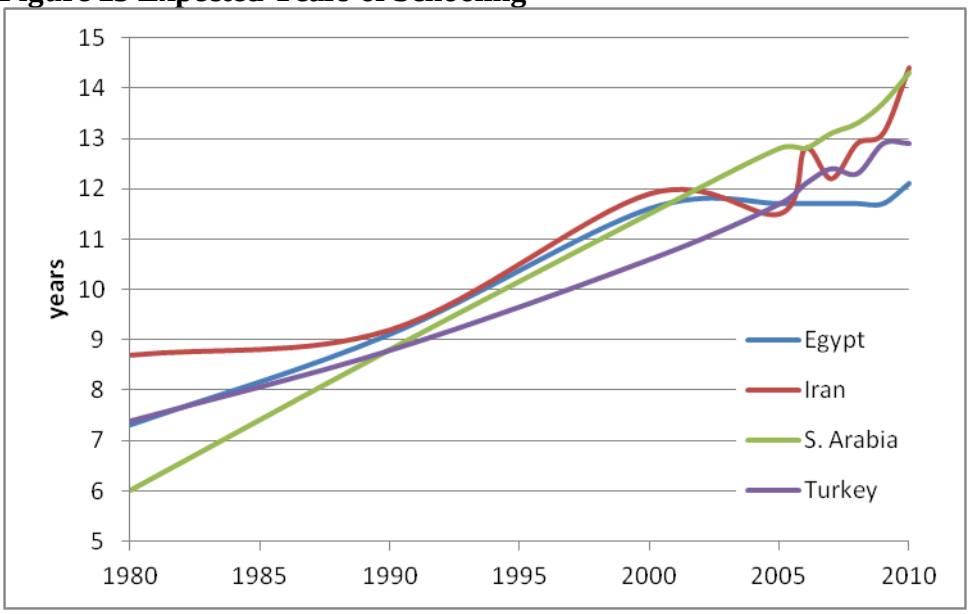
5.1.3.2. Mean and Expected Years of Schooling

As indicated in Figure 22 (see Annex 11), there has been a steady rise in the average length of schooling the adult populations (over 25 years) of the case countries receive. Saudi Arabia and Egypt had rather uniform development as both countries gained 3.6 and 4.3 years of schooling per adult. In Turkey, despite fast initial gains,

progress has been lagging behind the remaining case countries since around 1990. With a gain of 5.7 years, Iran has had the highest growth (comparatively highest between 1980 and 2000) in mean years of schooling, moving from the bottom of the group to the top.

The trends have varied more in terms of expected years of schooling (see Figure 23). Egypt experienced fast gains from 1980 to 2000 with a period of stagnation the following decade. In Iran, expected years of schooling stagnated throughout the 1980s alternating to a fast growth in the 1990s. A decline followed in early 2000s with a high gain of 2.9 years between 2005 and 2010. From among the case countries, Saudi Arabia had biggest gain of 8.3 years within the measurement period with rather stable rate of increase. On the contrary, Turkey has seen comparatively low gains in education as measured by expected years of schooling, except the last decade of the focus period.

Figure 23 Expected Years of Schooling



Source: UNDPf

5.1.4. Gender Equality

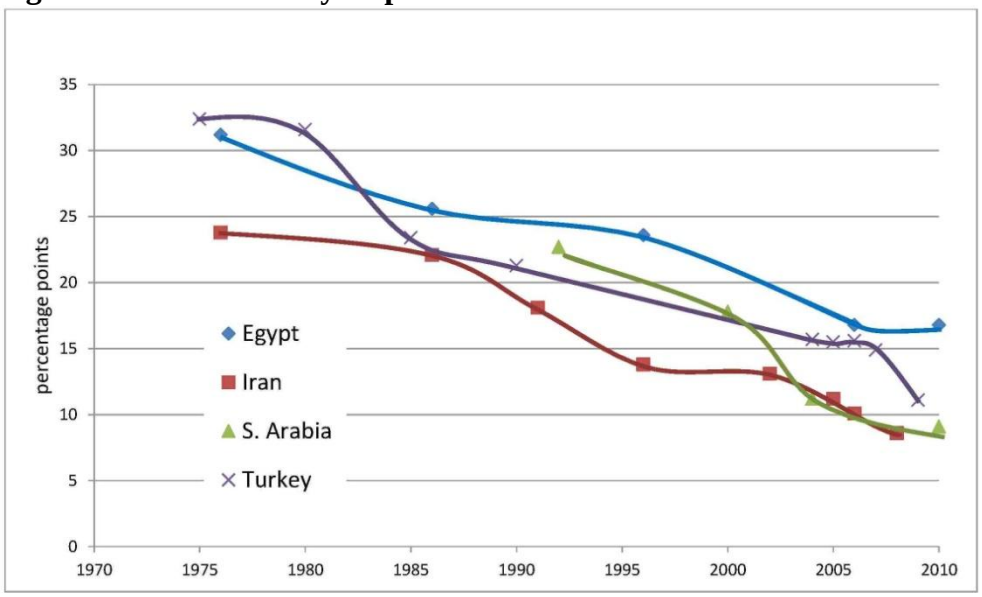
5.1.4.1. Literacy Gap and School Enrollment Ratio

It is apparent from Figure 24 that there has been a profound reduction in the difference between literacy of men and women in all of the case countries. At the end of the period, Iran boasted the lowest literacy gap, followed by S. Arabia, Turkey and

Egypt indicating different levels of discrimination of women in accessing education. Turkey has had comparatively highest reduction in the literacy gap while Egypt had the lowest.[41] It is worth mentioning that the literacy of women has increased the most in Iran (56 percentage points) while Turkey had highest women literacy (85%) at the end of the period (see tables in Annex 12 for more detail).[42]

Among the varying trends in reducing women literacy gap, it is possible to point out particular periods for each country, when women saw fastest improvement in their access to education. Egypt, where the curve is rather flat, is an exception. In Iran, there has been a marked improvement between 1985-1995 and then late 2000s, in Saudi Arabia in early 2000s, and in Turkey between 1980-85 and in late 2000s.

Figure 24 Adult Literacy Gap



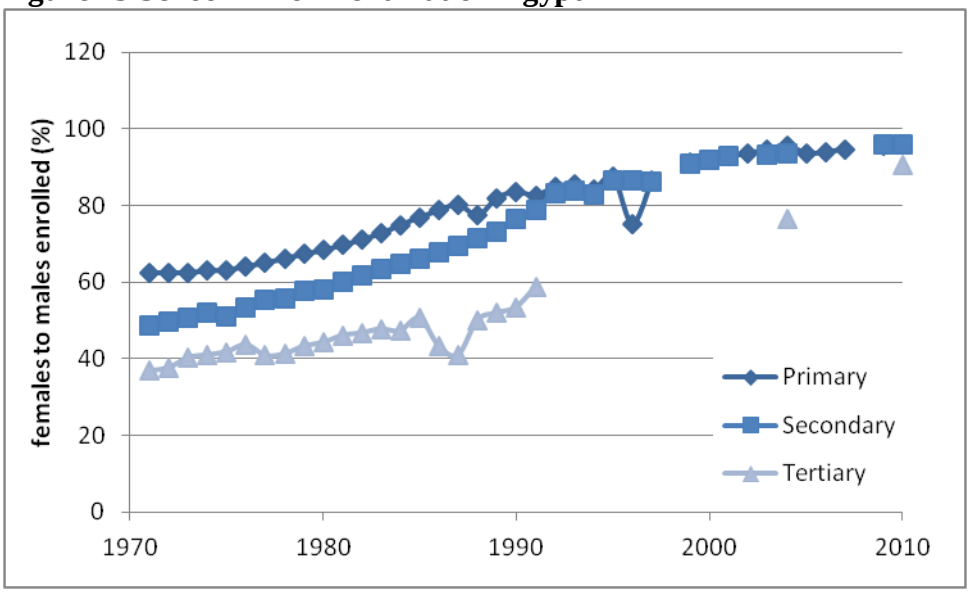
Source: UIS

The school enrollment ratio is another useful indicator showing gender disparities in access to education. As we can see from Figure 25 to 28, the four case countries have almost achieved gender parity in access to primary education (95-99%) at the end of the focus period. In secondary education, Egypt and Iran are also close to parity (above 96%) while S. Arabia and Turkey are slightly worse off (around 90%).

[41] Note that Saudi Arabia records literacy rates only since 1992 excluding the possibility of comparing the reduction in the literacy rate with the remaining countries.
[42] While Turkey has had highest literacy rates for both men and women throughout the measurement period, women

In tertiary education, the results for female-to-male enrollment are more varied. Iran and S. Arabia have had more women enrolled in universities and colleges throughout the 2000s while the ratio for tertiary education was 91% in Egypt and 82% in Turkey.

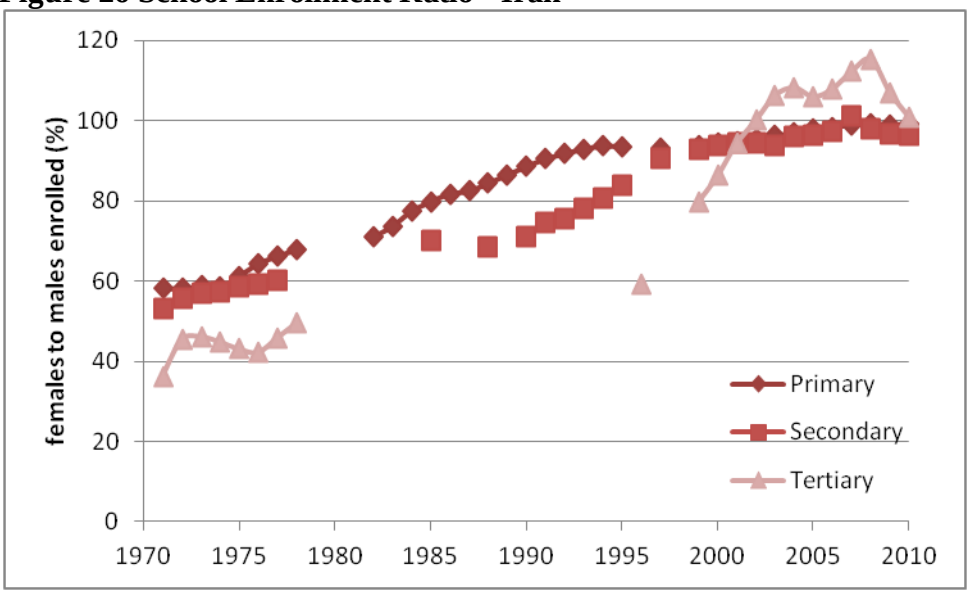
Figure 25 School Enrollment Ratio - Egypt



Source: WBh, WBi and WBj

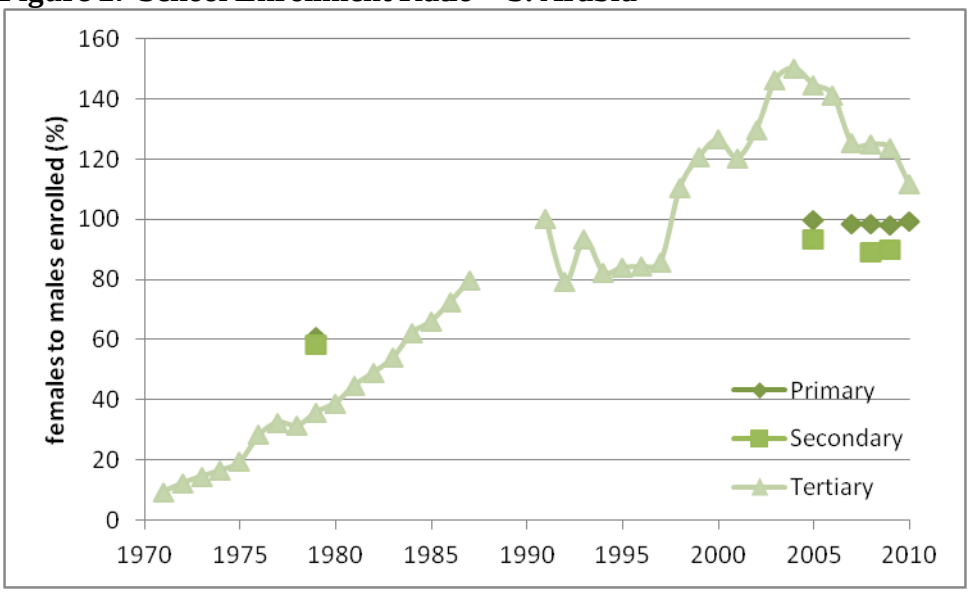
As for the shifts in trends in the case countries, trends have been stable in Egypt. In Iran, pronounced acceleration is visible in primary education from mid 1980s until mid 1990s, in secondary education from 1988 until 1999, and in tertiary education from 1996 until 2008, after which the ratio has dwindled to a point of parity. In Saudi Arabia, data is scarce except for enrollment in tertiary education. The share of women attending universities and colleges in S. Arabia has been growing sharply from the beginning of the measurement period (except mid 1990s) until 2004, when there were three women to two men enrolled. Since 2005, the ratio has declined.

Figure 26 School Enrollment Ratio - Iran



Source: WBh, WBi and WBj

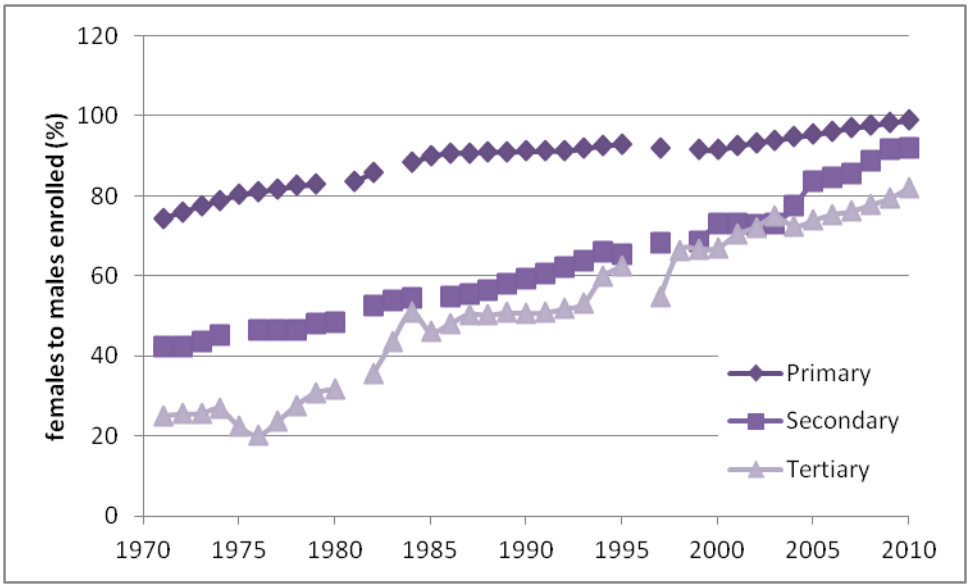
Figure 27 School Enrollment Ratio – S. Arabia



Source: WBh, WBi and WBj

In the case of Turkey, women's enrollment in primary education has been above the ratios in the rest of the group throughout the measurement period, while enrollment in secondary and tertiary education has been lagging behind. In secondary education, the enrollment ratio has had accelerated growth since 2003, while women's enrollment in tertiary education showed faster growth since mid 1970 to mid 1980s.

Figure 28 School Enrollment Ratio – Turkey

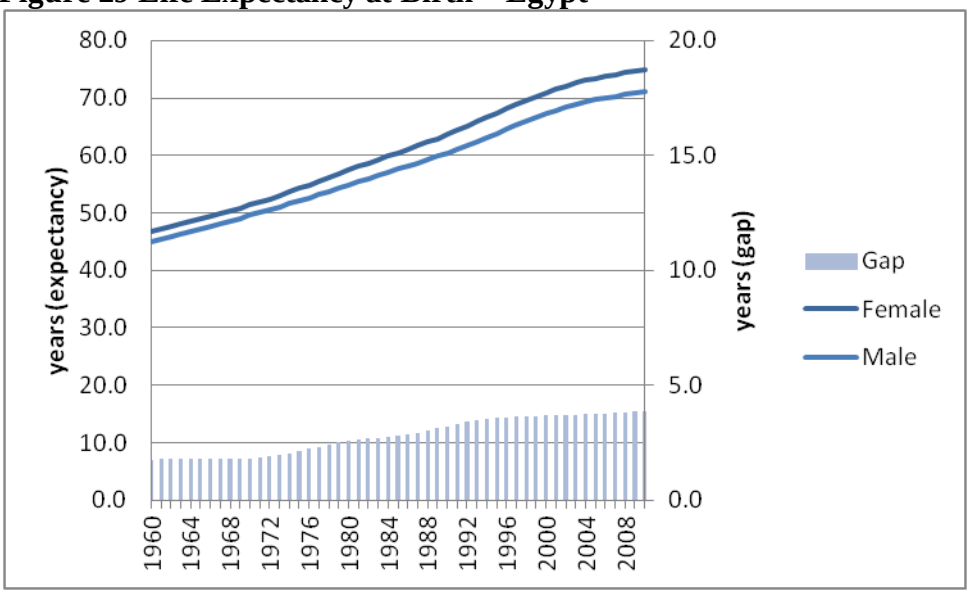


Source: WBh, WBi and WBj

5.1.4.2. Health – Life Expectancy at Birth and Maternal Mortality

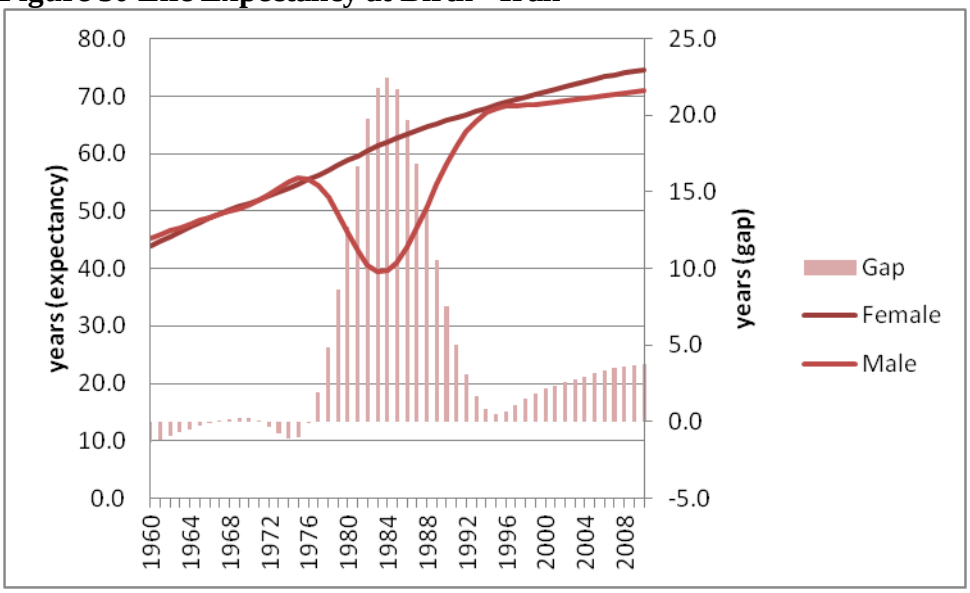
If we consider the assumption of the World Health Organization that gender inequality reduces the difference in life expectancy between men and women (2009; see ch. 4.2 for more detailed description of the phenomenon), then the attached figures (29 to 32; see Annex 13 for more detail) indicate decreasing gender disparity in the case countries. An exception is Saudi Arabia, where the difference in life expectancy has been stagnating or growing. Comparatively highest improvement took place in Iran, where women lived on average shorter than men did until 1976. Then, because of the ongoing revolution and war with Iraq, the mortality of men rocketed causing a rapid decline in their life expectancy. The results of this dramatic development are visible until 1995, when the difference in life expectancy of men and women hit a low of 0.5 year compared to 22.4 years in 1984. Since then, the life expectancy of women has grown comparatively faster than of men suggesting a marked improvement in the status of women.

Figure 29 Life Expectancy at Birth – Egypt



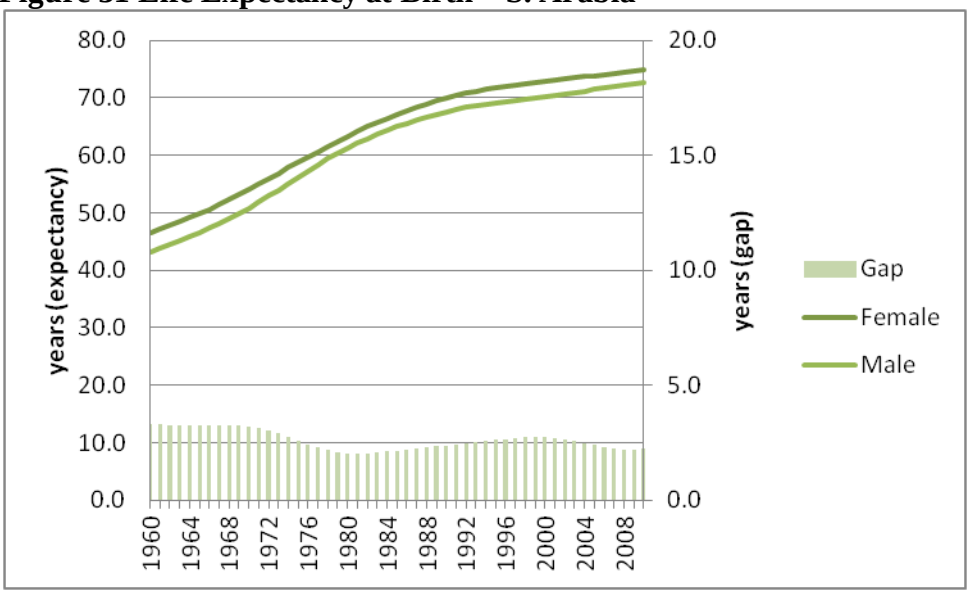
Source: WBk and WBl

Figure 30 Life Expectancy at Birth - Iran



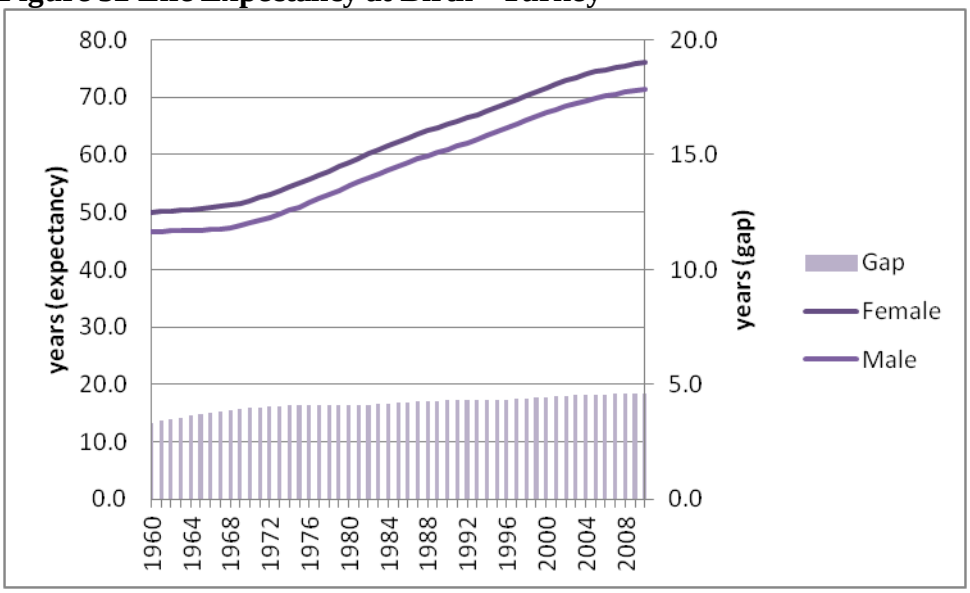
Source: WBk and WBl

Figure 31 Life Expectancy at Birth – S. Arabia



Source: WBk and WBl

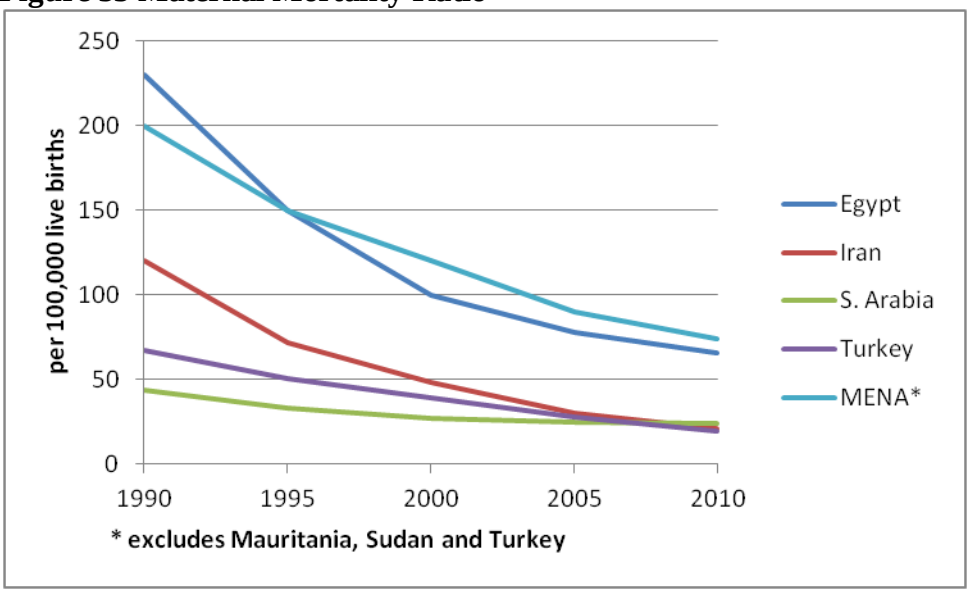
Figure 32 Life Expectancy at Birth - Turkey



Source: WBk and WBl

In Figure 33, we can see the changing patterns of maternal mortality from 1990 to 2010. While Iran, Saudi Arabia and Turkey achieved similar values (20 to 24 deaths per 100,000 births), Egypt had a comparatively high rate of maternal mortality (above 60). Although it needs to be stressed that Egypt has experienced the highest reduction in maternal mortality during the measurement period. All countries saw most pronounced reduction trend at the beginning of the 1990s.

Figure 33 Maternal Mortality Ratio



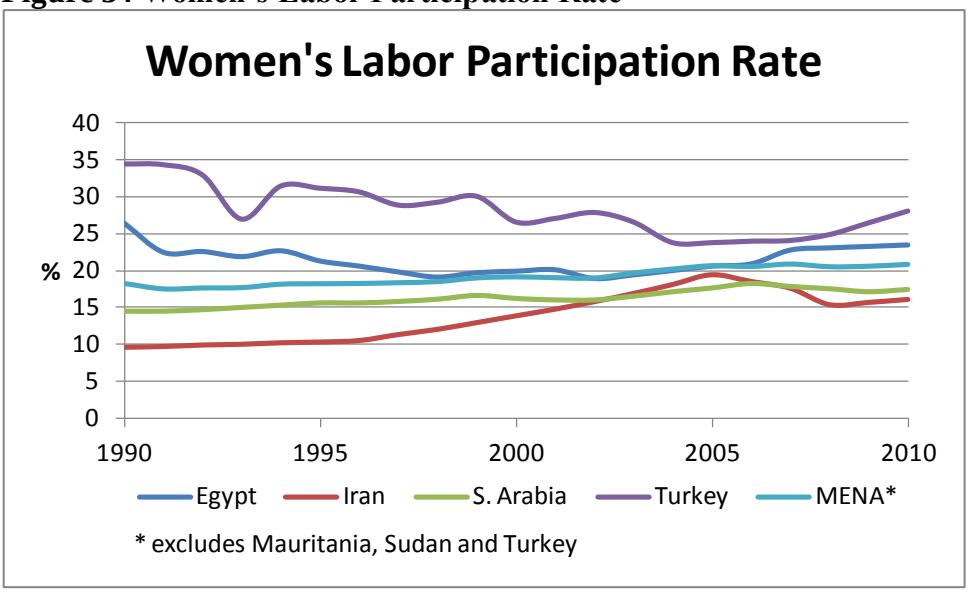
Source: WBm

5.1.4.3. Participation of Women in the Labor Force

The participation of women in the labor force shows differing trends in the case countries (see Fig. 34 or Annex 14). In Turkey and Egypt, the percentage of women working outside of their households was in gradual decline from 1990 to mid 2000s picking up again only towards the end of the focus period. In Iran, the proportion of economically active women grew from mid 1990s to mid 2000s reversing into decline and stagnation during the rest of the focus period. Saudi Arabia achieved only marginal progress.

While in Turkey and Egypt the share of employed women is above the average of MENA, in S. Arabia and Iran the rate is below the average. Considering that the region has the lowest proportion of economically active women globally as already mentioned in the previous chapter, the rate in Iran and S. Arabia will be among the lowest in the world despite a high educational attainment of women.

Figure 34 Women's Labor Participation Rate



Source: WBn

As the various indicators show, we can distinguish several periods, when significant changes in the trends of socio-economic development occurred in the case countries. Those are important moments, which are later considered in the analysis of the political and economic transformations and their impact on socio-economic development.

In Egypt, the beginning of the focused period is distinguished by the economic decline during the last troubled years of the monarchy, when agricultural and industrial production stagnated and the government spent only limitedly on education, health or other infrastructure (cf. Issawi, 1947; Hansen, 1991). With the overthrow of the monarchy, a period of growth and improvement in human development started as the government spent heavily on expanding the industries, infrastructure and government services. The era ended with the escalation of the conflict with Israel in the second half of the 1960s and the stagnation outlived Nasser and the open warfare with Israel. The late 1970s and early 1980s were marked by accelerating growth in most indicators in the wake of rapid economic expansion and political and economic reforms. When the country encountered economic problems at the end of the 1980s and early 1990s and started a period of economic adjustment, the progress in most indicators of human development visibly slowed down. While many trends started accelerating at the end of the 1990s again, education (e.g. mean and expected years of schooling, gender gap) remained stagnant.

In Iran, we can distinguish five periods in the trends of socio-economic development that largely coincide with the political and economic transformations in the country. First, the economy was in decline at the beginning of the focus period when the government attempted to nationalize the oil industry and subsequently failed amidst British and American embargo of the country. Second, during the 1960s and first half of the 1970s many indicators had accelerated growth as the country was experiencing the fervor of rapid economic and social transformation spurred by growing oil revenues. Third, the trend slowed down and regressed (most notably economic growth and life expectancy) as the country entered a period of turmoil surrounding the fall of the monarchy, the Islamic revolution, and the war with Iraq. Fourth, in the second half of the 1980s when the war was still raging many indicators saw fast improvement (i.e. mean and expected years of schooling, literacy gap, women's school enrollment. When the war ended, economic indicators also recovered. The period of accelerated growth ended around 1995, following which the indicators continued improving albeit at a much slower rate.

In Saudi Arabia, data is scarce for the first half of the focus period except for economic indicators. Yet, as the review of literature in the section below indicates, human development as measured by indicators of health, education, and gender equality largely followed quick expansion of the economy supported by the growth of oil revenues at the end of the 1960, and in the 1970s. The 1970s and to a certain extent the beginning of the 1980s were the period of fastest improvement. An important observation is that while the economy mostly stagnated or contracted during the 1980s and 1990s, indicators of human development continued on a path of steady improvement.

In Turkey, economic growth was extremely cyclical with periods of rather fast growth intersected by periods of contraction. On average, the economy maintained positive growth rates for all five-year periods (see Fig. 16 and 17), which distinguishes Turkey from the other case countries. The indicators of human development were at higher level in other case countries at the beginning of the focus period. However, rather slow rate of improvement meant that other case countries eventually outperformed Turkey. Only during the late 2000s was there a period of faster improvement in multiple indicators (e.g. life expectancy, under-five mortality, literacy gap and women's school enrollment) allowing Turkey to catch up.

5.2.Analysis

This chapter analyzes the political and economic transformations that underlie the changing patterns in the development of the socio-economic indicators given in the previous section 5.1. The causality behind the policies and socio-economic development is untangled. This section handles each country individually with reference to developments in other case countries or the focus region when relevant. First, the state of economic development is handled followed by human development in accordance with the areas given in chapter 4 – health, education, and gender equality. Obviously, the different aspects of socio-economic development are interdependent as already explained in chapter 4 and the separation between them is rather arbitrary and serves only the purpose of a better clarity of this thesis. The main merit of this chapter is to show how different regimes fared in their socio-economic policies and how regime changes transformed those policies.

5.2.1. Egypt

The first half of the 20th century in Egypt was marked by economic stagnation and low human development of most people. According to estimates, the economy grew only by 0.5% annually during those 50 years (Hansen, 1991). The country depended on export of cotton to cover government expenses and the majority of population worked in agriculture mostly as sharecroppers or day laborers. Industrial activity was limited to small manufactures or to the processing of agricultural products – cotton, tobacco, sugar (Issawi, 1949). On the eve of World War II, only 15% of the population could read and write. Epidemics and malnutrition were a constant threat to the people. Nevertheless, Egypt was considered the most developed country of the Middle East during the first half of the 20th century (Yousef, 2004). This may not be the case at the end of the focus period in 2010 as the country is among the least 'developed' countries of the broader Middle East. Yet, as the profound changes in the socio-economic indicators show, the country has made a tremendous progress towards improving the status of its economy and quality of life of its people.

5.2.1.1. Economy

At the beginning of the focus period, Egypt had market-oriented economy with state intervention limited to the protection of the local market from foreign competition through custom regimes. The stagnation of the post-WW II years turned

eventually into a lasting recession (Hansen, 1991). Such a negative trend together with political problems of the country added on importance to calls for radical changes in politics and economy that finally took place after the overthrow of the monarchy in 1952. These radical changes materialized under the leadership of Gamal Nasser as he introduced the vision of Arab socialism, which he based on extensive state interventions into the economy, and heavy investment in physical capital that sustained relatively high growth of per capita income. Import substitution industrialization was the preferred strategy of the time (Yousef, 2004). A key aspect of the new scheme was the nationalization of the Suez Canal in 1956, which helped the regime to secure foreign currency to fund its development projects (Sayyid-Marsot, 2007).

The public sector gradually expanded through expropriation and establishment of public companies to include a large share of the country's economy. State departments directed the different sectors of the economy and set output targets for individual companies as well as wages and prices (Hansen, 1991). The turmoil accompanying the largest nationalization fervor of 1961/1962 is responsible for a short contraction as companies changed hands, replaced managers and trade was disrupted (ibid). The hard currency to fund development projects came largely from the Suez Canal fees, oil exports and foreign borrowing and later from remittances sent by Egyptian workers in the Gulf countries (El-Ghonemy, 1998).

From the short-term perspective, the new statist model of development paid off handsomely. According to Richards and Waterbury, the newly developed industries ranging from consumer items such as textiles, car assembly and pharmaceutics to capital goods like steel or heavy machinery provided one million new jobs (1996). The single most important (and lasting) feat of the era was the construction of the High Aswan Dam that opened to full operation in 1970 regulating the floods on the Nile and covering 50% of Egyptian electricity (Abu-Zeid and El-Shibini, 1997). Yet, there were some shortcomings inherent to the economical model that eventually spelled the end of the Arab socialism.

The expanding Egyptian industries required growing imports of capital goods and inputs while they were producing hardly any foreign currency revenues as they focused completely on covering the domestic market (Richards and Waterbury, 1996). Unlike Iran or Saudi Arabia who could cover their industrialization expenses from oil

revenues, Egypt had to rely on foreign borrowing. By 1966, the country found itself in a difficult financial situation with large budget and current account deficits and growing debt. In short, the country was facing a shortage of foreign currency (Hansen, 1991). Compounding the economic problems, scarce resources were being diverted from capital investment to military build-up as the country was waging a war in Yemen and later with Israel (ibid). The impacts of the war with Israel were economically disastrous as Egypt lost its two main sources of revenue – first, the oil fields were lost to the Israeli occupation of Sinai and second, the Suez Canal was closed and became the new frontline between the two countries. The military confrontation with Israel continued well beyond the short war of 1967 straining Egypt's resources even further (Owen and Pamuk, 1998). Eventually, the economic troubles necessitated a change of the economic policy.

In 1974, Egypt instituted and open door policy ('infitah' reforms) based on attracting foreign investment into domestic industries, increasing the quality and range of products to substitute imports as well as increasing exports of certain items such as textile and clothing (AfDB, 1999). Essentially, the statist model of development and closed character of the economy prevailed while foreign participation increased (Licari, 1997). Easing macroeconomic problems, the country was awash with foreign currency. First, the Egyptian workers benefiting largely from the oil boom remitting billions of dollars to their home country,[43] second, the rich Gulf countries sent financial help to aid Egypt in recovering from a military confrontation with Israel, and third, Egypt's own oil export revenues multiplied rapidly with the growing price of oil (Kerr, 1981). In its dependence on windfalls of money, Egypt started resembling oil rich Middle Eastern countries. When the windfalls ended as unexpectedly as they began, the boom of the Egyptian economy ended too.

With declining government revenues in the 1980s – a decline of oil revenues reduced Egypt's export earnings and the inflow of remittances from the hundreds of thousands Egyptians working in the Gulf (Richards and Waterbury, 1996) – the statist economic model in many of the Arab countries, including Egypt, became exhausted. The state could no more afford to sustain high economic growth by heavy investment into physical capital. At the same time, the lack of funding meant that government

[43] 10-15% of Egyptian labor force was located in the Gulf Countries (Hansen, 1991).

services could barely cope with the growing population (Yousef, 2004) and the improvement in the quality of life stalled. Attempts to solve the economic problems by foreign borrowing caused a debt crisis and spiraling inflation rather than changing the fortunes of the country (Diwan, Underwood and Squire, 1993). The lack of foreign currency limited imports increasing prices and reducing industrial activity due to the lacking inputs (AfDB, 1999). As the government was not able to service its extensive debt, Egypt had to start negotiating assistance from the WB and IMF at the end of the 1980s and ultimately implement structural adjustment in 1991 (Licari, 1997). At the same time, Egyptian investment was flowing out of the country (accumulated capital flight amounted to 150% of the GDP; Diwan, Underwood and Squire, 1993) proving severe inefficiencies in the Egyptian economy that discouraged the Egyptians from saving and investing in their own country.

The two-year adjustment program included deregulation of prices, reduction of subsidies, liberalization of foreign trade (elimination of quotas and non-custom restrictions) as well as deregulation of the private sector (quotas on production), and privatization of state companies (AfDB, 1999). An era of accelerating economic growth with low inflation followed due to the success of the macroeconomic stabilization (see Fig. 9 in ch 5.1). The reforms eliminated current account deficits, reduced fiscal deficits, restored foreign exchange reserves, and limited inflation (Licari, 1997). However, the single most important factor of the stabilization process occurred outside of Egypt. As the Paris Club wrote off a half of the Egyptian foreign debt, balance of payments surpluses appeared suddenly due to the reduction of debt service (Richards and Waterbury, 1996). It remains a question, to what extent would have Egypt achieved such positive results without the debt relief.

Despite continued liberalization, businesses in Egypt have to cope with a complex regulatory environment, high costs, and widespread corruption that discourage private investment in productive sectors. The bureaucratic burden is particularly heavy on small businesses that provide most of employment as policy reforms favor large companies (WB, 2003). Another problem that affects private sector is low enforceability of contracts as only one third of court cases related to business gets solved with an average length of six years per case (ibid). Throughout the 1990s, exports were affected particularly hard by the abovementioned constraints on Egyptian production. As a result, the country has the lowest share of manufactured

goods and services in its foreign trade in the focus region (except some of the Arab Gulf countries; Licari 1997). It is obvious, that the government policy continues to be highly partial towards certain groups (finance, trade, real estate) thwarting economic development of the country.

The acceleration of the economic growth since the year 2000 can be attributed to foreign investment as the country removed some of the barriers related to foreign ownership, recruitment of non-Egyptian staff, and repatriation of capital that had discouraged direct and portfolio investment in the second half of the 1990s (cf. Licari, 1997). Already in 2000, Egypt accounted for half of the FDIs in the focus region, excluding Turkey and small gulf countries (Yousef, 2004).

At the end of the 2000s, the country was again approaching its financial limits. While global economic crisis has reduced government's revenues, the food crisis has been driving up subsidies due to the government's obligation to cover the price difference in the buying and selling price of the subsidized items. The actual amount of subsidies rose sevenfold between 2000 and 2009 consuming 2% of the GDP (UNDP, 2010a). The revolution that overthrew president Mubarak and surrounding turmoil did only little to stabilize the country's ailing economy.

The last 40 years of Egyptian economic policy may be characterized as a period of long deferred and only partially executed reforms of the Arab socialism introduced under Gamal Nasser. Long after statism and import substitution industrialization stopped being a factor stimulating the development of Egyptian economy, the public sector continues to occupy a large part of the economy, and the state retains many of the policies (extensive bureaucracy, administrative regulation, employment laws) introduced half a century ago. The inefficiency and inequity of this structurally adjusted Arab socialism continue to hinder economic development in Egypt.

5.2.1.2. Health and Education

The rapid political and economic transformations in Egypt at the beginning of the 1950s led to profound changes in the welfare of the people. Increasing economic output throughout the 1960s and 1970s in collusion with the highly interventionist-redistributive character of the state translated into increasing spending on education and healthcare. As a result, the quality of life of the average Egyptian started

improving with declining child mortality, growing life expectation, and school enrollment (Yousef, 2004).

Despite the original success of the 'infitah' reforms in increasing real incomes of most segments of the society during the 1970s (Sala-i-Martin and Artadi, 2002) and ultimately in increasing the quality of life as schools and improved infrastructure (roads, sanitation, electricity) proliferated (Owen and Pamuk, 1998), some benefitted more than the others. The result was growing inequality in latter decades. As Yousef points out a feature of the Egyptian reforms was their partiality. The reforms suited only particular groups linked to the ruling clique (2004).

The liberalization of the economy under the 'infitah' reforms also brought a violent backlash from the masses as the government withdrew subsidies on food stables in 1977 (Richards and Waterbury, 1996). Under the pressure from the street, the Sadat government restored and eventually expanded the subsidies (Owen and Pamuk, 1998). The lessons learned by the government from the bread riots meant that there would be no redefinition of the welfare state in the future reducing the impact of future reforms. Reforms were only-half hearted as the government had in mind its survival rather than a well-performing economy or welfare of the people (see below).

When the country entered a period of slowing economic growth in the 1980s, the improvement in the quality of life also decelerated (see ch. 5.1) as the country had to cope with quickly expanding population (AfDB, 1999). Salaries in both private and public sector declined as the country struggled economically. By the end of the decade, real wages of government employs were worth only half of the value they had in 1973 and the wages of unskilled laborers contracted by 40% since the beginning of a fiscal crisis 1986 (Richards and Waterbury, 1996). The number of poor rose relatively in its share on the total population and in absolute numbers during the 1980s and 1990s and so did inequality (El-Ghonemy, 1998). As Hansen points out, the closed nature of the economy prevailed, and the people well positioned at the bottleneck benefitted as they replaced state in importing or had a share in the business ventures benefiting from foreign investment (1991). However, it needs to be acknowledged, that the government invested heavily in education throughout the 1970s and 1980s (UNDP, 2010b), meaning that the overall educational achievement continued to grow, albeit at a lower rate.

The structural adjustment of the 1990s might have contributed to the macroeconomic stabilization of the economy but its ultimate result was a further stagnation of most of the trends of socio-economic development followed in ch. 5.1 as austerity reduced government spending on public services and limited employment in the public sector.

The austerity era of reduced government spending coincided with large cohorts of young people born in the postwar period entering the labor market driving up the unemployment. This is mostly visible in the public sector, the main provider of employment, as countries tried to reduce government bureaucracy. The rising unemployment presents a common feature of many Middle Eastern countries as the economies cannot generate jobs for the new entrants (Yousef, 2004). As a result, unemployment has grown to 20% of adult male population during the 1990s in Egypt (WB, 2003b) with significant ramification for human development.

The UNDP indentifies the high prevalence of poverty in Egypt as one of the causes of low performance in socio-economic development (2010b). This view is confirmed by the WB, which states that school enrollment in the poorest quintile of the society is only around 50% and the child mortality rate in the poorest governorates of the country is double when compared with the richest ones (2003b). Income is a major factor determining access to education and healthcare in Egypt. Thus, government policy that perpetuates poverty and inequality in Egypt is partly to take blame for Egypt lagging behind other countries of the region.

In general, the reforms of the 1990s are blamed for increasing inequality and poverty in Egypt (AfDB, 1999; Licari, 1997) hindering socio-economic development. An example is education, where improvement as measured by expected years of schooling has stalled after year 2000 (see Fig. X, ch. 5.1 or Annex 11) as school dropouts and number of out-of-school children (i.e. children who have never been to school) remain to be high, particularly in poverty-stricken areas (UNDP, 2010b). Those can be identified as approximately 1,000 communities (out of 4,700 towns and villages) that lack roads, potable water, sanitation or electricity and are located primarily in the south of the country, and in informal urban settlements (ibid). This suggests a particular failure in government policy to provide services on equal basis to the people.

Although Egypt defined education as a right already in the constitution from 1923, it was not until 1953 that elementary education became compulsory. In 1962, the government eliminated tuition at all levels of education, removing the economic barrier to better school accessibility (Hansen, 1991). However, broader expansion of education was prevented by disproportionate allocation of resources into higher education at the expense of elementary schooling, especially during the 1960s and 1970s, when a dozen of new universities were established (ibid). Consistently, the higher education consumed 30% of the country's educational budget (Richards and Waterbury, 1996). Thus, government policy prevented a more equitable access to education. Mostly the middle and upper classes benefited from heavily subsidized colleges and universities in contrast to the prevalence of illiteracy in rural areas, where there were not even basic educational facilities available.

The government aware of the precarious situation in the education sector committed itself to improving access to education and made lower secondary education compulsory spurring an increase in expected years of schooling during the 1990s (see Fig. 23, ch. 5.1; WB, 2003b). This meant not only mandating longer compulsory education but also providing classrooms and teachers for the increased number of students. Despite the initial success, the number of expected years of schooling stagnated again during the 2000s. For many poor families, the opportunity costs of sending their children to school remain too high if we accept the aforementioned argument of poverty being the main obstacle to improving human development in Egypt.

Another area, where some progress has been achieved during the 1990s, is life expectancy, which accelerated its growth (see Fig. 19, ch. 5.1). One of the possible explanations is a large improvement in sanitation, particularly in rural areas, where the share of household with improved sanitation grew from 79 to 96% during the decade, reducing occurrence of disease (ibid).

On the other hand, child mortality remains to be comparatively high in Egypt. One cause of the high rate of child mortality is the low share of children immunized against the DPT,[44] which is lower than in other regions of the world with similar income (ibid). Also, the (lack of) education of women plays a role, as 70% of children who die before their fifth year are born to illiterate mothers (UNDP, 2010a) showing

[44] Diphtheria, pertussis, and tetanus.

the interrelation with gender equality that is comparatively low in Egypt, when compared to the other case countries. Similar logic is also observed in relation to family incomes (ibid) further confirming the problem of prevailing poverty as an obstacle to development.

5.2.1.3. Gender

Much like in other aspects of socio-economic development, Egypt is also lagging behind the other case countries in the issue of gender equality. It was not until the 1990s that major government initiatives to improve the status of women are introduced.

An example comes from the end of the 1980s and the beginning of the 1990s, when the share of girls enrolled in schools relative to boys picked up as the government focused on building girls schools in marginalized areas (rural areas and impoverished governorates of Upper Egypt; see Fig. 35, ch. 5.1; WB, 2003b). However, girls form a disproportionately high share of out-of-school children (13% of females aged 10-29 have never been to school compared with 3% for males), while once in school their dropout rates are similar to boys (UNDP, 2010b). This means that girls face problems outside of the educational system that prevent them from enrolling. One possible explanation may be the conservative culture or prevailing poverty in certain areas of the country as girls are needed to help with housework or care for younger children (El-Sanabiy, 1989). The regional disparities prove this hypothesis, as females enrollment ratios (reflecting among other things also the number of out-of-school girls) are markedly low in border areas and Upper Egypt (UNDP, 2010a).

In order to deal with the problem of out-of-school girls, the government has set on a program of creating one-classroom schools that combine basic literacy with income generation and vocational training and target working girls. Since the mid 1990s more than three thousand of such school were built (ibid). Thus, government efforts are responsible for the progress in improving women's access to education relative to boys.

A particular area, where Egypt has achieved relatively great success is the improvement in the health of mothers as measured by maternal mortality (see Fig. 33, ch. 5.1). A comprehensive policy of antenatal care, and immunization of pregnant women that is provided in special health centers should be credited with this

improvement (more than 4,500 of such centers exist; WHO, 2010). However, the availability of such care remains limited in rural areas of the country, where only half of births is assisted by skilled medical staff (UNICEF, 2011).

During the 1990s and 2000s, working women became one of the first causalities of structural adjustment. Especially among young educated women, there has been a steep decline in labor participation rate in the 2000s the share of employed women holding high school diplomas decreased from 52% to 18% between 1998 and 2009 (UNDP, 2010b). The reason is a reduction in government employment, which used to be the main provider of employment of educated women as a part of the reform package sanctioned by the IMF and WB (ibid). This phenomenon of relatively high number of women employed in the public sector goes back to the government of Gamal Nasser, who instituted a policy of state employment for every graduate. Since women unlike men had much lower chances of finding jobs in the private sector, they were logically the ones to benefit most from this policy.

Traditional gender biases play a significant role within this process of renewed exclusion of women from the labor force. In times of job scarcity employers, including the government, give men preference over women since they are supposed to pay for the marriage and provide for the family (UNDP, 2011).

Of importance is also the form of education girls receive. Especially in the secondary education they are overrepresented in general high schools where they gain only limited practical skills compared to boys, who dominate in the vocational and technical stream. This affects negatively the labor participation rate (UNDP, 2010a). This largely reflects government policy, which determines specialization of schools.

In general, women in Egypt have been suffering from poor access to education, healthcare, and job opportunities. Only few government initiatives have been implemented with only partial successes. It is not likely for Egypt to overcome its gap in socio-economic development unless it addresses also the situation of the Egyptian woman.

The results of the sixty years of government efforts in promoting socio-economic development have been rather mixed. The implementation of government policy has been at occasions marred by negligence (e.g. failure to reach most areas of the country), mismanagement (e.g. focus on higher education at the cost of

elementary schooling), and a failure to consider poverty and inequality as a factor that hinders human development. This allowed for the implementation of economic reforms that enriched only certain segments of the society while perpetuating poverty of others to a great detriment of socio-economic development of the whole country.

5.2.2. Iran

Despite early modernization efforts by Reza Shah in the first half of the twentieth century, Iran was largely a poor agrarian and rural society with only limited infrastructure at the beginning of the focus period. Outside of the oil sector, 'industry' was limited to the production of carpets, textile and handicrafts (Esfahani and Pesaran, 2009).

5.2.2.1. Economy

In 1949, Iran prepared its first economic plan based on using oil revenues to fund its investment projects (ICS). The desire to increase the funds available for development led to the nationalization of the British-owned oil industry. A subsequent international embargo on Iran and domestic tension crippled the economy with a general decline of GDP per capita (Gasiorowski and Byrne, 2004).

After a coup sponsored by the Americans reinstalled the Shah, Iran started receiving larger share of the oil revenues. The country set to expand industry by providing cheap credit to the private sector but a high dependence on the import of capital goods increased balance of payment deficits and the country had to seek assistance from the IMF at the beginning of the 1960s as the economy slowed down and contracted in 1962 (Esfahani and Pesaran, 2009). Later, growing oil revenues and improved government policy started transforming the economy at a fast pace.

The industrialization of Iran during the White Revolution' was based on high tariff protection of the local market, cheap credit to private companies and driving demand by consumer subsidies. In order to diversify production, the state paid for new production lines to be used by private companies or established factories by itself (Karbassian, 2000.), mainly in the area of processed food or consumer goods, such as textile, apparel, household appliances or chemical products (Askari and Majin, 1976). At the same time, tax breaks attracted foreign investment in automotive industry or steal mills (Karbassian, 2000.). As in many other developing countries, ISI strategy dominated economic thinking.

The strategy achieved its stated goals, and gradually, the imports of consumer goods declined relative to inputs and capital goods throughout the 1960s and early 1970s (Askari and Majin, 1976). Much like in other countries practicing ISI, the impact on overall balance of payments was rather negative increasing the country's dependence on oil exports to cover trade deficits. This likely did not worry the Iranian government in an era of constant oil prices.

Paradoxically, the rapid pace of economic development during the 1960s could not have been sustained despite, or because of, growing oil revenues (Esfahani and Pesaran, 2009). The windfall of money following the oil crisis of 1973 made the Shah dream of turning Iran into one of the most industrialized countries within 20 years. The country set on an ambitious program of spending 120 billion dollars on industrialization within five years borrowing excessively against future oil revenues and running high budget deficits (Gubruz). Understandably, the spending free prompted rising inflation. Facing popular discontent at the rising cost of living, the regime asserted to violence, prosecuting retailers for growing prices. As a result, private businesses started reducing their investment (Esfahani and Pesaran, 2009). By 1977, the country was in a deep economic crisis. Situation only worsened the following year as strikes by the people dissatisfied with the economic situation and Shah's repressive rule paralyzed the oil sector, banking, and industry. By the end 1978 daily production of oil dropped by 95%[45] (Bahmani-Oskooee, 2005) making it impossible for the government to fund services or honor its foreign commitments.

Despite the effective end of the Shah's rule, economic problems continued as the Islamic revolution progressed. Within months of the Shah's departure, capital worth of ten billion US dollars left the country followed by thousands of senior managerial staff (Karbassian, 2000). Later, the United States froze Iranian foreign assets. When Iraq invaded Iran in 1980, the oil exports were cut by half and the country had to rely on the import of diesel and heating oil as refineries were hit by Iraqi air strikes (Bahmani-Oskooee, 2005). The rise of inflation and depreciation of the Iranian Rial were only logical consequences of the economic downfall of the early 1970s and early 1980s with general scarcity of goods (see Fig.18, ch. 5.1).

[45] From 6.1m barrels a day at the beginning of the year to 300,000 at the end of the year (Bahmani-Oskooee, 2005).

The Islamic revolution meant not only sweeping political and social changes but also economic restructuring as the government nationalized thousands of businesses or transformed them into foundations and endowments (so called bonyads[46]) controlled by the clergy or chief military personnel (Brumberg, 2013).[47] The chaos accompanying the change in ownership and the establishment of a command economy during the founding years of the Islamic republic further exacerbated war damages to the economy (Behdad and Nomani, 2002). Inevitably, the beginning of the 1980s was a period of marked economic decline (see Fig. 10 and 11, ch. 5.1).

After years of tumult, the economy rebound in 1982 as the government gained new revenues by selling oil below global price, supported agricultural production by handing out tractors and fertilizers to farmers for free and solved shortage of consumer goods by trading with Third World countries (e.g. India, Pakistan, Turkey; Gubruz). From 1984, the economy started shrinking again as Iranian oil terminals and shipping were frequent target of Iraqi attacks. Concurrently, the price of oil on the global market was collapsing in the wake of the 'oil glut'. While the country's oil revenues diminished, it had to rely on imports to provide for its war efforts and civilian population (ibid). The country continued running high balance of payment deficits driving down the Rial while increasing inflation (Alizadeh, 2000). Another blow to the Iranian economy was the introduction of a total embargo on Iranian exports by the USA in 1987 (ICG, 2013).

To address its financial problems the government maintained a policy of multiple exchange rates. While non-essential imports were either restricted or subject to a 'commercial' rate close to the black market value of the Rial (less than one twelfth of the official rate) making imports comparatively expensive, exports were subject to the official rate making them uncompetitive on the global market (Bahmani-Oskooee, 2005). The attempts to save non-oil production to cover domestic demand while preventing nonessential imports in order to save foreign currency to finance war efforts were the likely motivation behinds this policy. Although this

[46] Although the 'bonyads' receive preferential access to loans, allocations of foreign exchange at the concessional official rate and are exempted from paying taxes, they are outside of government control (Alizadeh, 2000).

[47] In its anti-capitalist ideology, the regime was hostile to capital accumulation and private enterprise, which it perceived as a barrier to creating a society based on social justice and equality (Esfahani and Pesaran, 2009).

austerity-like policy might have helped the government to survive financially without the need for extensive external borrowing,[48] it was a failure from the perspective of economic development. According to Behdad and Nomani, high unemployment, stagnating wages and general scarcity were characteristic of the second half of the 1980s. High population growth made the problems only worse and was at least partly responsible for the high decrease in output per capita (2002).[49]

The end of the war with Iraq was soon followed by the death of the anti-capitalist leader Ayatollah Khomeini giving opportunities for the reconstruction of Iranian economy. In 1989, the government introduced a five-year program of economic reconstruction (Karbassian, 2000) based on liberalization of trade and foreign exchange, introduction of incentives to private investors deregulation of prices, and reduction of subsidies, in essence paving a way for a transition to a market economy (Behdad and Nomani, 2002). As a result, both investment and consumption increased rapidly in the first years of the plan stimulating quick growth. The inflation was also stable (see Fig. 11 and 18 in ch. 5.1; Alizadeh, 2000).

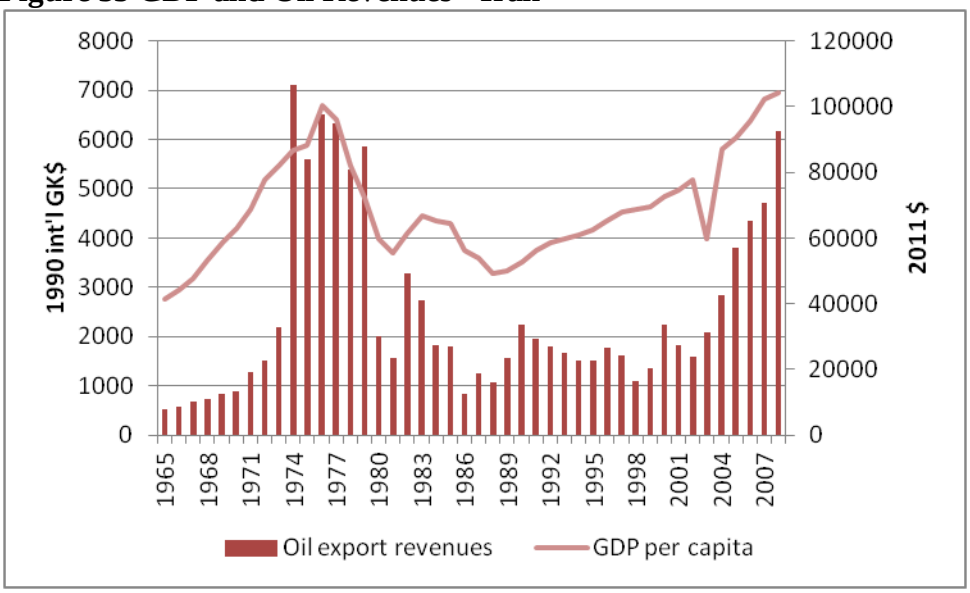
Part of the policy of economic recovery in the early 1990s was gradual abandonment of multiple currency rates in favor of a single official rate close to a floating rate (Bahmani-Oskooee, 2005). The result was a growth of trade, export in particular (cf. Esfahani and Pesaran, 2009) spurring a period of economic development during the 1990s with a growth of manufacturing in both scale and diversity (Behdad and Nomani, 2002). In general, dependency on oil exports declined (see Fig. 35 below and Annex 16). In this regard, the 1990s prove to be an exceptional period as the economy grew significantly despite mostly stagnating and declining oil revenues. In all other historical periods, the changes in the output of the Iranian economy have been largely linked to oil export revenues as economic growth was driven at large by the investment of oil revenues within a very rigid system of government control that gave only little space and incentive for investment outside of government programs. In the 1990s, the economic and political opening was the main driver behind the economic development of that era. This said, Alizadeh reminds, that despite liberalization of the economy, privatization of many state owned companies,

[48] While Iran had an external debt of less than $2bn in 1990 (WBo), Iraq had accumulated more than $40bn in external debt during the war with Iran (Caron, 2004).

[49] The population grew by 17.6m during the crisis period (1977-1988), which is an increase of 50% (Maddison).

and growth of export, Iran retained an overall industrialization model based on import substitution and state interventionism (2000).

Figure 35 GDP and Oil Revenues - Iran



Source: Maddison, BP

The reduction of the rigidity of government policy manifested itself in the relaxation of government's stand against foreign borrowing and the country started borrowing money abroad to overcome shortage of foreign currency that accompanied the process of trade liberalization. Unlike other countries, which could borrow from the IMF and WB in order to reconstruct their economies, Iran had to rely on short-term borrowing with high premiums on the free market (ibid).[50] A debt crisis followed when the maturation of most Iranian obligations coincided with a slump in the oil prices and Iran had to negotiate the rescheduling of its debt in 1993 (ibid). Although the government avoided major economic problems by increasing import restrictions and by controlling currency flows (Esfahani and Pesaran, 2009), the economic growth slowed down for the rest of the decade as reform efforts stalled after the debt crisis (ibid, Alizadeh, 2000, Behdad and Nomani, 2002). In response to a major devaluation of the Rial and scarcity of foreign currency, the inflation shot up to 50% (Behdad and Nomani, 2002).

[50] The USA blocks Iran from receiving assistance from those institutions (Alizade, 2000).

Despite renewed sanctions from the US (newly banning all US experts and investment in Iran in 1995) the country continued expanding its trade relations with several Western and third-world countries (Esfahani and Pesaran, 2009). Most affected by the sanctions was the oil sector as the ageing oil infrastructure has been lacking major foreign investment reducing the production capacity of the Iranian oil fields or preventing expansion of gas exploitation (ICG, 2013). Paradoxically, international sanctions during the 1990s might have thus contributed to the diversification of the Iranian economy and reduction of its dependence on oil sectors. Later in the 2000s, rising oil prices offset the inability of Iran to increase its revenues by expanding production and Iranian oil export revenues reached highest levels in more than 30 years (see Fig. 35 above).

Besides the partial liberalizations of the economy, a rapid reduction in fertility rates promoted by government's commitment to family planning was another decisive policy positively influencing socio-economic development.[51] In 15 years, government's policy helped to reduce the fertility rate from 6.6 children per women in 1985 to 2.5 in 2000, the lowest in broader Middle East (Yousef, 2004).[52] This development has helped to reduce the pressure on the labor market and government services saving scarce resources to improveg the services rather than merely expand them to cope with the rapidly growing population.[53]

Although, the economy expanded fast during the second half of the 2000s, the government policy behind the growth were not sound – excessive government spending, low interest rates, and increased lending by state banks (ibid). The result was growing inflation pressure (see Fig. 18 in ch. 5.1). To cope with the inflation, the government tightened control over currency exchange and costs by allotting foreign exchange at concessionary rate to key importers while restricting its supply to most Iranians and companies (Amuzegar, 2013). Compounding Iranian economic

[51] Quick growth of population strains the country's resources. Extensive amount of money needs to be disbursed to keep the same level of services, while slower population growth means money can be also spent on improving the services rather than merely expanding then. Rapid increase of population also means growing labor force. The economy needs to create a large number of jobs to swallow the increase. Otherwise, unemployment grows pushing down salaries because of the surplus of workers (Richards and Waterbury, 1996).

[52] The policy was based on increasing the use of contraceptive, providing planning assistance in more than 15,000 health clinics in the country, and obligatory courses on family planning attended by couples before marriage. Religious authorities have repeatedly endorsed the policy contributing to its success (Roudi-Fahimi, 2002).

[53] The annual increase of the population in Iran has slowed down from the average of 1.25m during the 1980s to 0.325m during the 2000s (Maddison; see Annex 3).

problems, the US and its allies imposed sanctions on Iranian banking system banning financial transactions with the country (gradually from 2007). As a result, Iran cannot trade directly with many countries. This increases transactional costs for Iranian exporters, as intermediaries have to be used, and reduces Iranian access to hard currency (mainly Euro and the US Dollar; ICG, 2013). The result was a decline in goods exports in the second half of the 2000s as exporters had to import inputs at the floating rate due to the shortage of foreign exchange, while they had to export at the overvalued concessionary rate enforced by the central bank (Amuzegar, 2013). Inevitably, Iran's dependence on oil has risen during the late 2000s precipitating some harsh consequences when the European Union and some other countries introduced an embargo on imports of Iranian oil in 2012.

The high level of government spending on subsidizing private consumption is a partial explanation of Iranian economic problems including high level of inflation. Beyond the negative side effects, the World Bank points out also that subsidized consumption is an inefficient tool of poverty alleviation as the rich receive more money in absolute terms because they consume more than the poor (WB, 2003b). In the case of Iran, government subsidies and allocation of foreign currency at concessional rates to selected importers weakens Iranian manufacturing and agriculture reducing productivity as idle workers cannot be laid off due to the restrictive labor law (Behdad and Nomani, 2002; Karbassian, 2000).

To conclude the 60 years of Iranian economic policy, it needs to be said that external forces (war, sanctions, and changes in oil prices) played a significant role in the economic development of Iran, more than in any other of the case countries. The Iranian government is however not without a part in such events. The insistence on deposing Saddam Hussain before agreeing with a peace treaty with Iraq prolonged the war as much as the refusal to limit Iranian nuclear program brings harder international sanctions. Nevertheless, the government policy largely determined the impacts of such external factors on the Iranian economy. While in the 1960s oil revenues contributed towards diversifying the economy, the spending spree of the 1970s caused an economic crisis that precipitated the Islamic revolution. Similarly, in early 1980s the government was able to reach positive economic growth amidst sanctions and ongoing warfare by its agricultural and trade policy, while a few years later austerity ravaged the economy amidst similar conditions. In the 1990s, the combination of

declining oil revenues and renewed American sanctions prompted the government to open the country's economy to the benefit of Iranian manufacturing and commerce. Ten years later, the government used expanding oil revenues to counter additional sanctions by allocating cheap credit and foreign currency at a concessionary rate to select businessmen and government agencies to the detriment of the Iranian industry and agriculture. The full results of the latter development remain to be seen.

The overall conclusion is mixed. The government has used its leverage in the economy to promote economic development while at other occasions the policy hindered it. Except limited number of examples, when the external forces were overwhelming (e.g. extensive damage to Iranian oil infrastructure by Iraq), government policy was decisive in determining the state of economic development.

5.2.2.2. Health, Education

With the increase in oil revenues from mid 1960s, the Iranian government set on a policy of a rapid expansion of infrastructure and government services translating into growing quality of life of the people. A particularly important policy implemented during the 'white revolution' was expansion of education into rural areas through literacy corps (Esfahani and Pesaran, 2009). However, considering the dire situation in many areas of the country, the relative share of human development investment to capital investment was disproportionately low (Askari and Majin, 1976). Iran had some of the lowest values in many of the aspects of human development (life expectancy, literacy, mean and expected years of schooling, and gender equality – literacy and life expectancy gap) as the indicators in chapter 5.1 show. The difference in the pace of economic and human development is one of the likely causes of the growing dissatisfaction with the monarchy and ultimately of its replacement by an outwardly more just Islamic republic. The new Islamic regime used the oil revenues largely on social spending to gain legitimacy among the Iranian people amidst the hardship of a war with Iraq and international isolation.

Immediately after the revolution in 1979, the Supreme Leader declared a literacy campaign, which focused not only on children but also on illiterate adults (Ladier-Fouladi, 1997). This is a rather rare approach since other case countries focused almost exclusively on educating children. The efforts of the government focused largely on rural areas that had been underserved by the ancien régime and the availability of schools in rural areas greatly increased (Salehi-Isfahani, 2009). Due to

these changes, Iran has seen a rapid increase in the literacy rate during the 1980s (see Fig. 21, ch. 5.1). Contrary to the common sense, the highest improvement occurred between 1985 and 1990 as we can see from the chart in Figure 21. Despite an ongoing warfare and severe austerity, a strong commitment by the government brought a major success in fighting illiteracy.

In an effort to further increase the educational attainment of the population, Iran included middle school in compulsory education providing for the growth of expected years of schooling throughout late 1980s and 1990s (see Fig. 23, ch. 5.1; WB, 2003b). Eventually, the government made also secondary education obligatory (WB, 1999). The twelve years of compulsory education in Iran compare with only eight years in Turkey in the 2000s while during most of the 1990s it was ten to five years. This may partly explain the lower educational achievement in Turkey (see Fig. 22 and 23 in ch. 5.1).

In order to address the problem of school accessibility among the poor, the government created a program of free supplies, feeding and clothing for children in marginalized areas and set on establishing multi-grade classes and boarding schools in areas with low population density in order to increase availability of schools (UNDP, 2006). Increasing access to education was only a part of much broader comprehensive rural development program that aimed at bridging the gap between urban and rural areas. Similarly to education, the government implemented health programs in rural areas. Since 1985, more than 18,000 clinics were established covering most areas of the country. The result was a reduction of mortality and rise in life expectancy (Salehi-Isfahani, 2009). An example of the success in increasing the accessibility of health care is the comprehensive vaccination program introduced in 1984. Within seven years the prevalence of vaccination among children grew from 20 to 92% (Ladier-Fouladi, 1997).

Success in education and health care were conditioned by achieving almost universal electrification and connection to all weather roads in the Iranian countryside, which also contributed greatly to increasing material living standards of the rural population (ibid). Another feature of the early revolutionary period were high subsidies to farmers (up to 80% of production costs). The subsidies constituted a large transfer of money into rural areas that also helped to bridge the gap between cities and country side while residents of the cities benefitted too, as food prices were

kept low at a time of deep crisis during the 1980s (Richards and Waterbury, 1996). The alleviation of poverty in the countryside had to play a role in improving access to education, as school enrollment in general increases with the material wealth of the family (see ch. 4). In comparison, Egypt largely failed to address the income aspect of improving access to education and as result large pockets of illiteracy, high drop-out rates and out-of-school children persist in the impoverished areas undermining socio-economic development of the whole country.

The positive impact of the abovementioned subsidy policy during the 1980s contrasts with the allocations of foreign exchange to importers of foodstuff in the second half of the 2000s. In essence, the government subsidizes foreign producers to the detriment of Iranian farmers (see the previous section on economic development in Iran). It remains to be seen, how this policy will influence rural development in Iran in the future.

The improvement in socio-economic development continued in the 1990s and 2000s, often at an accelerated rate (e.g. mean and expected years of schooling – Fig. 22 and 23, adult literacy gap – Fig. 24, or school enrollment ratio – Fig. 26). The increased spending on education and healthcare motivated by government's efforts to improve its services in the period of post-war war reconstruction played a major role in this trend. Karbassian, (2000) and Esfahani, and Pesaran (2009) indentify the increased investment in human capital by the government as a decisive factor in spurring economic growth in Iran during the 1990s in addition to the liberalization of trade and growth of manufacturing.

The experience of Iran shows that government policy plays a decisive role in improving the level of socio-economic development. Even in times of extreme hardship, such as war and economic decline, a rigorous policy and strong commitment by the government to implement it may lead to a significant progress in human development. Further, such a policy needs to address inequality and poverty in order to be successful. This was the case with the Islamic republic during the 1980s. On the contrary, when socio-economic development fails to be inclusive, the implications may be tremendous, as the Iranian monarchical regime learned in 1979, when it was overthrown in a violent revolution.

5.2.2.3. Gender

As in most countries of the broader Middle East at the beginning of the 1950s, women in Iran were largely confined to their traditional role of caretakers and their limited access to education or legal status reflected this. As late as 1966, only 18% of Iranian women could read and write while in rural areas it was less than 5% (Afkhami and Friedl, 1994). Although the Shah's regime attempted to alter the status of the women in the society, particularly through a new family law that among other things rose marriageable age for women to 18 and put limitations on polygamy, the changes were only cosmetic. The law was largely not enforced and in 1976, almost ten years after the introduction of the law, more than 50% of women were married before they reached 17 years (ibid). Similarly mixed were the results of the expansions of the educational system. Although literacy and enrollment improved in all segments of the society, the gap between women and men grew larger (Girgis, 1996; Afkhami and Friedl, 1994).

The abovementioned situation changed with the Islamic revolution and from among the case countries, Iran has seen the largest improvement in women's literacy (see Annex 12). Shortly after the revolution in 1979, the government set on a massive literacy campaign that aimed at improving access to education for children as well as at teaching reading and writing to illiterate adults. Women benefited the most from the program, as they had been largely disadvantaged in accessing education (Ladier-Fouladi, 1997). An integral part of the policy was a program of creating girl's schools in poor and rural areas (WB, 2003b). It was also the separation of sexes in the school system and hiring of female teachers enforced by the new Islamic regime that allowed girls with conservative family background to enter education (Salehi-Isfahani, 2009; UNDP, 2006). As a result, there was a rapid growth in female school enrollment relative to boys and Iran has the highest enrollment rates among the case countries (safe for higher education, where it ranks second; see Fig. 26, ch 5.1).

In a push to improve the health of the population, health clinics have been established in most villages. Besides general health, the clinics focused on family planning and reproductive health instituting regular care for women. The reduction in fertility rate and maternal mortality shall be attributed to this policy (Salehi-Isfahani, 2009) as it among other aspects made near universal the presence of skilled medical personal at birth (UNDP, 2006). Indirectly, the improvement in women's literacy

aided in reducing maternal mortality as illiterate women are more likely to die during childbearing (ibid).

A negative effect of the revolution on women was the diminution of their legal status – women need permission from their fathers or husbands to enroll in study or to take paid work (Salehi-Isfahani, 2009). Further, an Islamic law discriminating women in matters such as divorce and child custody replaced the European-modeled family law from the Shah's era and legal marriage age was lowered from 18 to 9 years to comply with Islamic law (Ladier-Fouladi, 1997). Obligatory veiling of women became a visual indication of the changes in women's status. Nevertheless, it is a question if such changes actually enforced a real change in the status of women. As Ladier-Fouladi points out, the prevalence of early marriage subsided after the Islamic revolution despite its legalization and the average age of first marriage among women increased, likely due to the improvement in women's education (1997).

Although the overall participation of women in the labor force has been very low comparatively (as seen in Fig. 34, ch. 5.1), the MDGs repot from 2006 shows a different trend in skilled labor as women represent one third of technical and professional workers in the country (UNDP, 2006). This positive development has to be attributed to the rapid improvement in women's education.

Contrary to common misperceptions about the Islamic revolution in Iran and its impacts on the status of women, women have seen a major improvement in their access to education and health care, especially when compared with other countries in the region. Large part of the positive change relates to deliberate policies of the government. Some of the negative changes in the legal status of women had only a negligible if any impact on the overall progress of gender equality. On the other hand, the Shah's regime had achieved only limited progress, despite its vocal promotion of women's rights.

5.2.3. Saudi Arabia

At the beginning of the focus period, Saudi Arabia was a largely traditional society with most of the population engaged in nomadic herding or oasis agriculture with urban life limited to few ports on the Red Sea coast and to the holy cities of Islam, Mecca and Medina (Ajami, 1981). The country had no railways or paved roads with schools limited to the few urban centers and there was no industry except the

nascent oil exploitation on the Gulf coast (Owen and Pamuk, 1998). Obviously, the country has gone through tremendous transformation since.

5.2.3.1. Economy

Throughout the first two decades of the focus period, the economic policy of the government was based on spending oil revenues in the construction of infrastructure and to a limited extent on government services (ibid). Knauerhause gives an account of paving streets and roads, lying of water, sewage and electricity networks, all infrastructure that had been largely absent in Saudi Arabia into the 1950s (1974).

In contrast to other Arab countries, Nasserist Egypt in particular, Saudi Arabia based its approach to industrialization on providing subsidies to private enterprises (Richards and Waterbury, 1996). However, it was only relatively late (1964) that efforts to diversify the economy began when a plant for the production of fertilizers was established (Owen and Pamuk, 1998). Other industry that was developed at the time was that of cement production (Knauerhause, 1974). The presence of only few industrial plants outside of the oil sector during the first two decades of the focus period testifies to the rudimentary state of the Saudi economy.

In 1970, the country introduced its first five-year development plan, which focused (considering the rather modest anticipation of oil revenues) on improving human capital by increasing the educational attainment of the population. Because of the oil crisis, expected revenues more than quadrupled and the government found itself in trouble how to spend the revenues effectively (Owen and Pamuk, 1998). From all possibilities, the government decided on investing heavily in the country's infrastructure. Such projects could be relatively easily executed using foreign expertise, labor, and imported materials overcoming limitations of the local economy while they would be highly visible symbols of the rising Saudi power. The government expected that investment into physical infrastructure would have a great spillover effect spurring development of industry and other segments of the economy (ibid). The second plan (1975-1979) followed the same logic with the exception of promoting the creation of new industries through contracts with private companies (Looney, 1985). These were also highly prestigious undertakings as they included steel mills and large petrochemical complexes (Owen and Pamuk, 1998).

Because of the high investment, the economy expanded, the share of non-oil sector grew and so did the inflation. However, the focus on physical infrastructure and capital-intensive heavy industry lead only to a marginal growth in employment[54] that benefited largely foreign workers who dominated the construction and manufacturing (Looney, 1990). Although such approach to economic development might have been reasonable at its time given high oil revenues, small domestic market and shortage of qualified labor, it did little to create an economic system that could have been sustained without an outside source of funding. Saudi Arabia became a country dependant on a perpetual inflow of money from its oil exports. The shortcomings of such a system appeared sooner than expected.

During the 1980s, Saudi Arabia went through a lengthy period of economic decline (see Fig. 12 in ch. 5.1) that was caused not only by the decrease in oil prices but also by misguided public investment. Despite a quite high rate of investment (above 25% during the first half of the 1980s), public spending did not rescue the economy from depression (Sala-i-Martin and Artadi, 2002). By allotting public investment according to vested interests and political considerations in a time of a crisis the government took money from productive sectors into unproductive projects further depressing growth (ibid). An example is the decision to achieve self-sufficiency in wheat production. Although the project was successful in achieving its goal, it required heavy capital investment in the harsh desert conditions of Saudi Arabia, while the final product was five times more expensive than its price on the global market and had to be heavily subsidizes (Owen and Pamuk, 1998). Eventually, the government had to abandon the project due to the environmental (i.e. depletion of nonrenewable water resources) and financial considerations (Karam, 2008).

In overall, the public expenditure on investment (particularly on physical capital) has been in decline from 1983 until 2007 (Khatib, 2012). The government spent much of its foreign reserves, as it could not borrow money abroad due to the ban on interest in Islam (Looeny, 1984). Aggravating the decline in oil revenues throughout the 1980s, the country was financing Iraqi war efforts against Iran and at the beginning of the 1990s, when oil prices grew, the country bore the high cost of an offensive against Iraq to free Kuwait (Owen and Pamuk, 1998). It needs to be

[54] Despite a growth of 180% in industrial investment between 1975 and 1980, the employment in industry grew only by 35% (Looney, 1990).

acknowledged that the country experienced growth in the non-oil sector, particularly due to the construction of infrastructure as well expansion of government services contained in the development plans (Looeny, 1984).

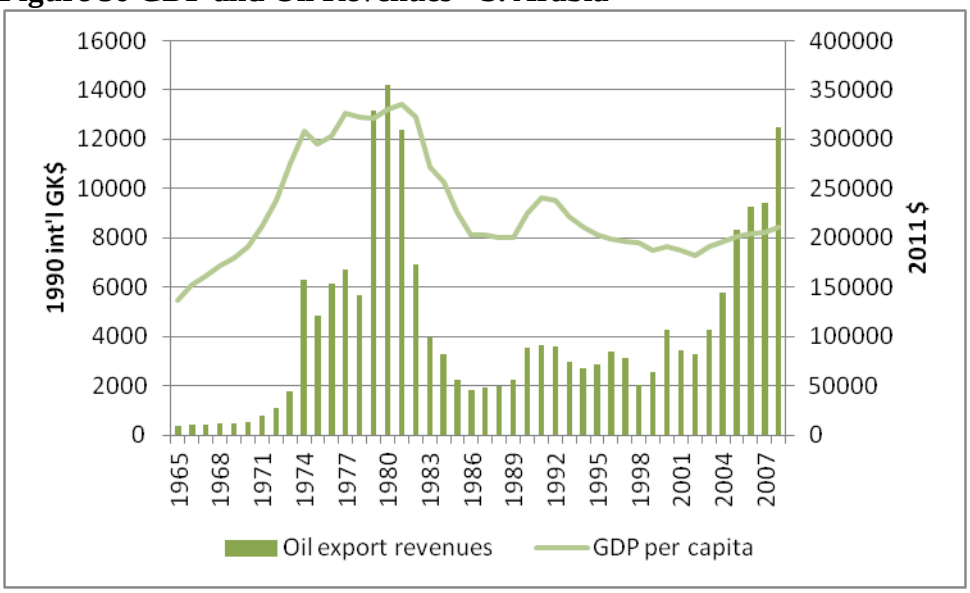
Besides the problems of public investment, the Saudi economy suffers from a restrictive economic environment that limits the possibilities of diversification of the economy outside of the oil sector. High administrative and financial burden to the registration of new business, the lack of credit to private companies (WB, 2003b), low enforceability of the rule of law, and long duration of court process handling business disputes discourage entrepreneurship (Looeny, 1984). In addition, the government imposes various restrictions on foreign investment, making strategic sectors of the economy off limits to foreign ownership. While the state subsidizes local businesses and exempts them from paying taxes, companies with foreign investment have to pay a flat income tax of 30% (Shackmurove, 2004). As a result, Saudi Arabia was receiving only limited foreign investment hindering expansion of the non-oil sector. The UN Economic and Social Commission for Western Asia points out that until the early 2000s, the inflow of FDIs was less than 0.5% of the Saudi GDP (2008).

The effects of government regulation were particularly visible during the 1990s. While the economy of Saudi Arabia was in decline, some other economies of the Gulf were growing at a fast rate. Yousef gives the example of the United Arab Emirates, where the economic growth averaged 7% in the 1990s and was carried largely by the expansion of the private sector (2004). Despite the wealth of its oil revenues, Saudi Arabia failed to become a major financial or trade center of the region and instead depends on service provided by companies based in Qatar or the UAE (ibid). As a result, the export of goods and services is minimal.

Thus, the government policy towards the private sector and investment thwarted the efforts to diversify the economy and as a result deepened the dependence of the economy on oil exports. At the beginning of the 2000s private sector formed only 24% of the economy (Shackmurove, 2004) while oil and gas exports provided for more than 80% of state revenues (UNDP, 2002) making the country highly vulnerable to price shocks. The absence of taxes partially explains this high

dependence (cf. Looney, 1984, PKF, 2002).[55] See Figure 36 or Annex 16 for the interdependence of Saudi GDP per capita and oil export revenues.

Figure 36 GDP and Oil Revenues - S. Arabia



Source: Maddison, BP

In the case of Saudi Arabia it can be said that the relative 'underdevelopment' of the non-oil sector cannot be blamed on any macroeconomic trends connected to a large amount of foreign currency entering the economy effecting a deindustrialization or in case of Saudi Arabia of non-industrialization (i.e. the Dutch disease). It is rather the deliberate policy choices of the Saudi government with its expected and unexpected outcomes. Spatafora and Warner give an empirical evidence to support this claim (1995). The fact that small Gulf countries relatively richer in oil that Saudi Arabia have been more successful in diversifying their economy also testifies indirectly to this point. Thus, the discourse of rentier[56] state is likely a more fitting approach to analyzing and describing the Saudi political economy.

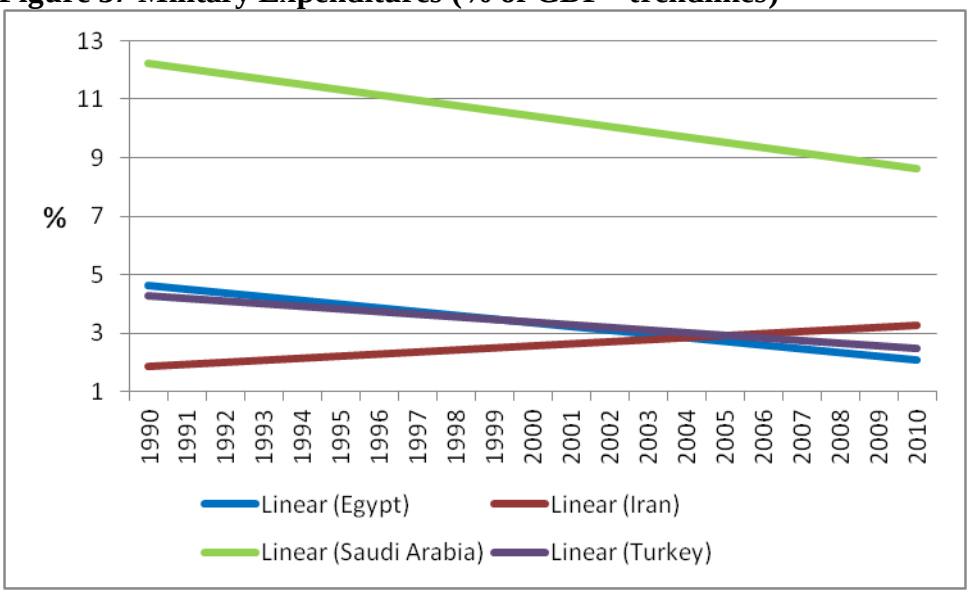
The rapid growth of oil revenues from the beginning of the 2000s had a positive impact on economic growth. After two decades of contraction, the economy

[55] There is no sales tax or value added tax, property tax or income tax (Saudi citizens only).

[56] This term applies to states rich in mineral resources. The abundance of funds from export revenues independent of the government's policies, taxes paid by the population or local economy outside of the resources extraction sector reduce government's accountability towards the people as well as responsibility towards future. The discourse of a rentier state is mostly used to explain the relative 'underdevelopment' of oil-exporting countries.

experienced a prolonged period of growth. However, the gains in output in per capita growth were small, lower than the growth in oil revenues (see Fig. 36 above). Although the exact causality is hard to determine, the inability of government to translate growing oil revenues into economic growth plays a central role since the government has a monopoly over the oil sector. The way the government handles its oil revenues is a likely key to determine the logic behind Saudi overdependence on oil. The government has spent extensively on its large military to keep a position of regional power and on welfare to silence dissenting voices. Between 1990 and 2010, the government spent 8-15% of the country's GDP (excluding off-budget spending) to arm and maintain its armed forces and other security services, comparatively the highest number in the focus region besides Israel (SIPRI; see Fig. 37 below or Annex 17). It remains a question, whether the Saudi military build-up adds to the stability of the region or heats up the many tensions in Southwest Asia. What is not questioned, is the fact that military spending is dead investment that does not add to economic development, especially if one considers that Saudi Arabia is largely dependent on imports of armaments.

Figure 37 Military Expenditures (% of GDP - trendlines)



Source: SIPRI

In terms of social spending, the government raised its expenditure by 10 billion US dollars in 2011 on housing alone in a response to calls for democratization of the Saudi society in the wake of the Arab Spring protests (Carey and Fattah, 2011). In total, the government increased its spending by more than 80 billion dollars that year to create new jobs, increase welfare benefits, and expand government services (Reuters, 2012). Although 2011 may be an extreme example, it illustrates the way the Saudi government allocates oil revenues for populist projects.

The presence of a large number of foreign workers in a situation of high unemployment among citizens[57] indicates serious problems in forming and using human capital (UNDP, 2003). As Achoui shows, Saudi educational system does not produce enough skilled workers for managerial, engineering and information technology positions. The resulting shortage needs to be covered by foreign employees. On the other hand, cultural biases against manual and low status jobs means there is also a shortage of workers in blue-collar jobs (2009).[58]

To conclude the second half of the focus period, overall economic growth was negative or very slow. Fast population growth only compounded the problems as the population grew between 1980 and 2008 by more than 180% (Maddison, see Annex 3). Yet, the state deliberately chooses for ideological reasons not to promote family planning and has pro-growth population policy (UN DESAc). At the same, the government policy mainly in the area of business environment hindered economic development. It is only very recently (since the mid 2000s) that the government started promoting foreign invest and deregulating the private sector, partly under the influence of the rather negative outcomes of its economic policies during the previous more than two decades (cf. ESCWA, 2008). The impact of these reforms on economic growth or dependence on oil exports remains to be seen (see Fig. 12 and 13 in ch. 5.1 and Fig. 36 above).

5.2.3.2. Health, Education

Solid data on Saudi Arabia for the early focus period is scarce. According to estimates, illiteracy stood at more than 90% in 1950 and only later in the decade started the government a program to encourage greater enrollment in the school

[57] 15% according to UNDP in 2002 (2002).
[58] The government claims Saudi nationals comprised 44% of the workforce in 2000 (UNDP, 2002). This is a substantial increase compared to year 1990, when there were 2-2.4 m Saudis in the labor force and 4.3m foreigners (Krimly, 1999).

system by making education free to pupils (Wiseman, Sadaawi, and Alromi, 2008). The expansion of schooling was greatly limited by the absence of qualified teaching staff and the country had to send future teachers to study in Egypt, as there was a lack of preparatory institutes in the country (ibid). In the 1950s, only males could attend state schools as girls schooling was not institutionalized until 1960 (Knauerhase, 1974).

In the area of healthcare, the situation at the beginning of the focus period was even direr than in education. In 1949, the country had approximately one hundred doctors and a similar number of hospital beds. Bilharzia, leishmaniasis, trachoma, tuberculosis and other infectious diseases were endemic in many parts of the country (Sebai, Milaat, and Al-Zulaibani, 2001). It was only in 1951 that a health ministry was established. The progress continued to be slow for the rest of the decade (Khaliq, 2012).

A change came in the 1960s when Saudi oil revenues started to grow. The oil bonanza of the 1970s then allowed the Saudi government to multiply its spending on government services almost overnight producing significant improvement in the quality of life as measured by education and health care (WB, 2003b). The government built hundreds of hospitals and thousands of health centers (UNDP, 2003). The need for medical staff and equipment, much like the need for physical capital and engineers, was solved by imports and thousands of doctors and nurses have been recruited abroad. The continued dependence on foreign workers has been a lasting legacy of the massive expansion of the health sector that the local medical preparatory education could not have kept pace with. In the early 2000s, only 20% of physicians and nursed were Saudi nationals (UNDP, 2002).

Eventually, the accessibility of health care, including immunization of children reached nearly 100% explaining fast improvement in indicators like life expectancy, and child mortality. The fact that healthcare is provided to all citizens free of charge eliminates inequality in access and is a part of the success behind improving health situation in Saudi Arabia (UNDP, 2003).

Although Saudi Arabia fares favorably in education and health when compared with other Middle Eastern countries, it lags behind other high-income countries notwithstanding its above-average spending (WB, 2003b). Other countries in the region (e.g. Iran) have achieved similar improvement in healthcare and

education with markedly less investment.[59] It needs to be however acknowledged that Saudi Arabia likely had the lowest level of human development of the case countries at the beginning of the focus period. Knauerhase reminds us that as late as the mid 1960s, half of the population lived in tents and only ten percent of the working age population had completed elementary school (1974). If we realize that forty years later the country had nearly universal education and healthcare, has almost reached gender parity in school enrollment, it is safe to claim that Saudi Arabia has achieved the largest progress among the case countries. Obviously, inefficiency and mismanagement were inevitable companions of such rapid expansion of government services considering the lack of skilled staff in the civil service. For example, the most important Saudi company stopped being operated by foreign companies only in 1988, when there was enough capacity among local experts to run the company without supervision from outside (Saudi ARAMCO).

In addition, the Saudi government remained committed to improving the services provided to the population despite declining revenues, fast growing population and many external and internal threats. During the 1980s and 1990s, when the government spending was in marked decline, public expenditure on education and healthcare was growing (Krimly, 1999). Whether it was because of a genuine interest in the welfare of the people or the need to weather off growing demands for the removal of the monarchy is a wholly different question.

5.2.3.3. Gender

The expansion of government services in the 1960s and 1970s benefited also women who for the first time had an opportunity to access them (WB, 2003b). In the previous period, males were given preference in accessing limited health services and education (El-Sanabiy, 1989). Formal education of girls did not exist until 1960 and even after its institutionalizing it was largely devoted to religious study and homemaking skills (Knauerhase, 1974). Despite slow beginnings, the consequent progress was quick. It can be seen on the enrollment of women in tertiary education compared to men, which almost quadrupled during the 1970s (see Fig. 27 in ch. 5.1). In an attempt to overcome the traditional biases against education of women, the

[59] E.g. Despite the fact that Iran spends on education and health only half of what Saudi Arabia spends in terms of share of GDP (9 vs. 4.5% and 4.5 vs 1.8% in 2000; WB, 2003b), the country achieves similar or better results suggesting high inefficiency in governmental spending in Saudi Arabia.

government made secondary education obligatory. The result was a quick convergence of girls' and boys' enrollment in education (UNDP, 2002).

The improvement in women's access to healthcare and to a lesser extent to education is reflected in the reduction of maternal mortality. However, the rate is slightly higher than in Iran. Rather than a problem of government policy of maternal health, the difference is caused by a lower percentage of births attended by skilled medical staff and higher fertility rate[60] due to the more conservative culture in Saudi Arabia (cf. UNDP, 2002, UNDP, 2006).

The participation of women in the labor force is low, although other countries in the focus region have lower rates (e.g. Algeria, Iraq, Iran, Syria). On the supply side, women are disadvantaged as they mostly study in non-technical and non-managerial majors and have as a result only limited employment opportunities outside of the governmental sector (Achoui, 2009). On the other hand, women with university degrees have the highest participation in the labor force (30-50% depending on the degree; ibid). Thus, the policy of increasing access to higher education pays off and will continue positively affect women's participation in the labor force as the number of women holding university degrees increases under the condition that their education becomes more responsive to the needs of the labor market (UNDP, 2002).

On the demand side, the conservative legislation severely restricts the employment of women discouraging potential employers. For example, until the end of the 1980s, Saudi Arabia limited by law women's employment to education, healthcare and social services (El-Sanabiy, 1989). Human Rights Watch details the obstacles to greater inclusion of women in the workforce. The segregation of sexes at workplace is required in the public sector and women may not work in areas where they would serve male customers. The private sector is encouraged to follow the same rules. In general, women need a permission of their male guardian to study or work and may not work in positions, which would require travelling alone or with a non-related men (2008). Hence, a paradox exists in Saudi Arabia. The government has greatly expanded educational opportunities for women, but it makes it extremely difficult for them to find employment.

Undeniably, Saudi Arabia is a country with one of the highest gender inequalities in the world, when considering the legal status of women. Biases in the

[60] 4.8 vs. 2.5 in 2000 (ibid)

government and society mean that women are treated as minors and more than that, there is a strong pressure to exclude them from public life. The extreme odds women face when looking for jobs are an example. The element of choice and influencing one's life is missing for Saudi women. On the other hand, in terms of living healthy lives and having access to knowledge, Saudi women have achieved much progress in a relatively short period.

5.2.4. Turkey

At the beginning of the focus period Turkey had absolved approximately three decades of state interventions in socio-economic development. Although much remained wanting, the country has achieved significant improvements in expanding its infrastructure (roads, railways and port), agriculture and to a certain extent also industry (Owen and Pamuk, 1998). As chapter 5.1 only partially indicates, the country was faring better also in human development than the other case countries. In general, the country has recovered from the break-up of the Ottoman Empire and maintained its sovereignty.

5.2.4.1. Economy

Turkey was one of the first countries to implement import substitution industrialization. Since the 1930s, Turkey has had a mixed economy with a growing share of state controlled companies and extensive state planning (Hansen, 1991).

After years of fast growth at the beginning of the 1950s, when the country benefited from war recovery and the Marshall Plan,[61] the economy slowed down for the rest of the decade as Turkey experienced quickly growing population and declining terms of trade (i.e. decreasing prices of its main export commodities; Owen and Pamuk, 1998). It was much outside of the government's capacity to influence this development. In an attempt to overcome the impeding stagnation, the government loosened banking restrictions; a period of heavy borrowing to private and state companies followed that eventually ended up in a payment crisis and consequent recession (1960-1961; Hansen, 1991).

For the rest of the century the country was to experience many similar cycles of heavy borrowing to cover investment and consumption, fiscal deficits, high

[61] Despite maintaining neutrality during the war, Turkish economy suffered heavily from the loss of markets and the high cost of keeping large standing army to fend off foreign interventions (Hansen, 1991); both Iran and Egypt were occupied by the Allies during the war.

inflation, and debt servicing problems induced by balance of payments problems and followed by austerity and recession. Such a pattern prevailed despite (or perhaps because of) changing ruling parties with differing economic policies and military interventions aimed at restoring order and salvaging the economy.

In the 1960s, the state furthered its control of the economy by establishing five-year development plans in line with the advice from the WB and IMF (OECD, 2002). The state started restricting imports by quotas, regulated prices and profits, controlled foreign currency exchange, and ultimately established several new enterprises, mainly in the production of capital goods (Owen and Pamuk, 1998). Economic planning was mandated by the country's new constitution inaugurated after a military coup that was among other reasons instigated to address the economic problems of the 1950s. Thus, the military prolonged Turkish etatism for two more decades (Hansen, 1991).

After initial austerity and macroeconomic stabilization, the 1960s were a relatively successful period of high or moderate growth rates (see Fig. 15, ch. 5.1). An inflow of remittances from Turkish workers in Western Europe eased the pressures to limit government spending in order to cut current account deficits (ibid).

With the onset of the oil crisis in 1973, this source of revenues started drying up as European countries facing economic stagnation introduce a highly restrictive immigration policy. Consequently, Turkey was threatened by a shortage of foreign currency as the costs of oil imports soared. Within this context, the decision of the Turkish government to invade Cyprus in 1974 proved a fatal mistake. Donors cut off all assistance (above 2% of GDP in the 1970s) exacerbating Turkey's financial problems and paving the way for another debt crisis in 1978 (Owen and Pamuk, 1998). As a result, the country had to implement structural adjustment from 1978 to1980 that curtailed economic growth for the adjustment years and for the period after, roughly until the mid 1980s (Hansen, 1991; see Fig. 15, ch. 5.1).

For more than two decades starting at the end of the 1970 Turkey was plagued by chronic inflation (see Fig. 18, ch. 5.1) that started to grow amidst the mounting financial problems as described above. Largely, government policy of high budget deficits and expansion of money supply partly to cover government's borrowing and partly to meet inflation expectation is to blame (OECD. 2002). Together with the high real interest rates and lthe ack of reasonable perspective for business planning, high

inflation discouraged both foreign and domestic investment, while the population had to cope with decreasing real wages. The situation fuelled further political instability and social tension (ibid). The result was the relatively high vulnerability of the Turkish economy during the 1980s and 1990s.

The change of political system after the coup of 1980 brought also a redefinition of the state's role in the economy, setting Turkey on a course to market economy, trade liberalization and export orientation. The government cancelled subsidies, price controls, and import licensing (Owen and Pamuk, 1998), which eventually helped to improve economic growth and reduce debt, despite prevailing high inflation. According to Hansen, the growth should be attributed to a rise in foreign trade, services (which had been hitherto only limited) and higher productivity (1991). At the same time, manufacturing grew only a little due to the fiscal and political problems of the country that reduced public and discouraged private investment when compared with the pre-adjustment period (Metin-Ozcan, Voyvoda and Yeldan, 2001). An undoubted factor that contributed to a rise in exports was the devaluation of the Turkish Lira by the government (Hansen, 1991).[62] Because of the reforms, the value of exports quadrupled between 1980 and 1987 (Roe, Roy and Sengupta, 1989). The growth of imports was equally impressive. Although the results of the structural adjustment are rather mixed considering the toll they took on human development as described below, they succeeded in stabilizing and later reviving the Turkish economy in the 1980s.

During the 1990s, the Turkish economy suffered extensively from poor government policy, including tiresome bureaucracy, frequent changes of legislation and inefficient tax collection. The government not being able to cover its expenses had to borrow excessively from local banks limiting the availability of credit to the private sector while driving up inflation (OECD, 2008). The financial and political instability of the era discouraged private investors limiting positive effects of the liberalization polices introduced during the 1990s (e.g. full liberalization of capital movements in 1989; ibid). At the same time, greater freedom of capital flows added to the highly cyclical character of the economy as the economy became more vulnerable

[62] As the domestic consumption declined due to the austerity, production was diverted for export. The prices of Turkish goods became cheaper overnight as the government wrote off 1/3 of the value of the currency to US dollar (Hansen, 1991; Metin-Ozcan, Voyvoda and Yeldan, 2001). A logical consequence was a reduction in balance of payments deficits.

to changes in short term capital flows due to the deregulation (Owen and Pamuk, 1998).

This tendency found a manifestation in the crisis of 1994, when after a period of implementing restrictive monetary policy the government decided suddenly to reduce interest rates to increase money supply. The subsequent drop in exchange rate caused a banking crisis as banks struggled to repay their foreign loans prompting capital flight and further depreciation of the currency by 65% (OECD. 2002). As a result, the GDP per capita declined by more than 7% and inflation shot up to over 100% (Metin-Ozcan, Voyvoda and Yeldan, 2001; see also Fig. 15 and 18 in ch. 5.1 or Annex 7 and 8). It needs to be acknowledged that the limited inflow of foreign capital into the country in the aftermath of the 1994 crisis cushioned Turkey later during the decade from the effects of the financial crises that struck many emerging economies in the second half of the 1990s (e.g. crises in South East Asia in 1997, in Russia in 1998; OECD. 2002).

The structural weakness of the economy further manifested itself in 2001. After years of political instability and growing budget deficits, a government crisis caused massive capital flight and depreciation of the currency by 50%. As the current account deficit expanded and Turkish foreign assets diminished the country came close to defaulting on its foreign debt (ibid). The financial crisis caused the deepest decline of Turkish economy in its modern history (see Fig. 15, ch. 5.1), a steep rise in unemployment and fall of real wages. The country had to negotiate a new stabilization package with the IMF.

The reforms following the crisis of 2001 were remarkably successful spurring fast economic growth accompanied by creation of jobs in both industry and services, reduction of government debt and inflation. OECD attributes this success to the reduction of government control over the economy, higher fiscal prudence, and banking sector, which promoted domestic and foreign investment (2008). The inflow of hard currency into the economy spurred appreciation of the Turkish Lira reducing inflation pressure to its lowest rates in more than 30 years (see Fig. 18, ch. 5.1). As a result, Turkish economy created 700-800 thousand jobs in manufacturing alone since 2001 and exports grew rapidly (ibid). In particular, the opening of accession negotiations with the European Union in 2005 boosted foreign investment. Because of the higher openness of the economy, the productivity of labor is high when compared

with most other countries in the region, although it remains well below the level of other OECD members (OECD, 2006). The rise of manufacturing and exports in Turkey contrasts strongly with the development in many other Middle Easter countries, including Saudi Arabia, where non-oil exports have been in decline for more than two decades (Sala-i-Martin and Artadi, 2002).

Nevertheless, the Turkish economy continues to be vulnerable to external shocks due to the role played by FDIs, portfolio investment and external demand due to the openness of the economy (OECD, 2008). While the influx of foreign investment balances out high current account deficits, a potential capital flight in the time of a crisis threatens to ravage Turkish finances (OECD, 2006). The global financial crisis of 2008 proved this as the Turkish economy declined under the pressure from weak foreign demand and a slump in FDI.

For the future, the country needs to further improve its business environment as stringent regulation and high procedural costs force many companies into informal sphere. This does not only reduce government revenues from taxes but prevents the expansion of the affected companies and disadvantages their employees in access to government services that depend on the payment of taxes (e.g. health care or pension; ibid).

Among the case countries, Turkey has a unique position as a country that is most closely aligned with Western countries, both politically and economically. At the same time, Turkey benefits from its proximity to other Middle Eastern countries that provide a market for the large Turkish manufacturing sector. It is likely that this position and the consequently high potential benefit of integrating the economy into the global market prompted the Turkish governments to continue in their liberalization policies despite the occasionally high political and social instability. Indisputably, much of the industry leading export in the last 20-30 years was established in the era of high protectionism, state interventionism and import substitution industrialization during the first half of the focus period. In overall, government policy helped Turkey attain the position of the largest and most diversified economy in the broader Middle East despite having no significant natural resources.

5.2.4.2. Health, Education

At the beginning of the focus period Turkey had fared better in human development that the other case countries, this is visible mainly in literacy and life expectancy. In Turkey, the government took a strong stance in promoting socio-economic development twenty to thirty years before the other countries. An example is education. Turkey introduced obligatory five year schooling for all children in 1924 and later in the 1930s started a literacy campaign that aimed to teach adults in all of the country how to read and write (Hansen, 1991). Egypt, Iran and Saudi Arabia introduced equivalent reforms only during the 1950s and 1960s. The same holds true for agricultural reforms that started in Turkey in the 1920s significantly easing the financial burden on the peasantry (e.g. abolition of the tithe and tax farming; Owen and Pamuk, 1998). Egypt followed by introducing caps on land rents in the 1950s and Iran in the 1960s.

After the initial zeal of literacy campaigns and compulsory education during the interwar period and early part of the focus period, the efforts stalled. Iran and Saudi Arabia eventually managed to surpass Turkey in several indicators (e.g. expected and mean years of schooling, literacy gap, enrollment ratios) despite having much lower starting base and a relatively adverse environment (e.g. highly conservative regime in Saudi Arabia prejudiced against women's education and a war and international isolation in Iran).

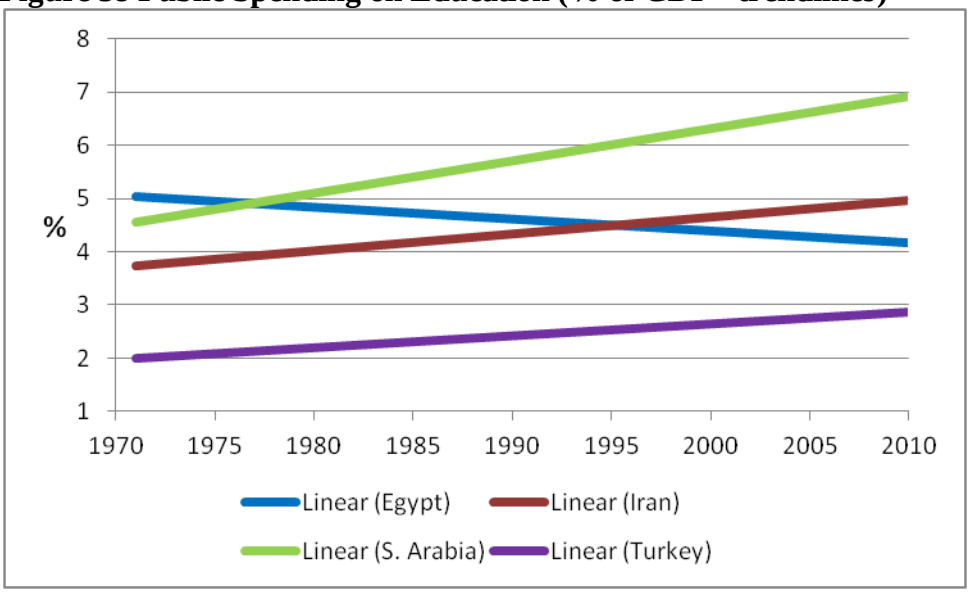
OECD pins part of the blame on gender biases in education as women in rural Turkey receive on average only three years of schooling when compared with the national average of six and half (2006). To address the problem of low educational attainment the government increased compulsory schooling from five to eight years in 1998 (UNDP, 2010c). In general, the eastern part of the country has been suffering from poor educational facilities and until the beginning of the 1980s, many of the villages lacked schools (Hansen, 1991). A particular Turkish problem is the absence of education in minority languages (cf. Bozkurt, 2010), which affects largely the Kurds. This means, that upon entering elementary school many of the children do not

know the language of the instruction. They can receive only little help from their parents who may not know Turkish well or may be illiterate.[63]

In order the address the urban-rural divide, Turkey established a network of secondary boarding schools in the sparsely populated eastern part of the country in the 1980s. The aims was to increase the accessibility of secondary education and make the completion of elementary schools more appealing to the pupils from remote villages, who otherwise could not continue with education beyond elementary level (El-Sanabiy, 1989). In order to increase enrollment on the elementary, the government started providing free school transportation to pupils from remote areas in the 1990s as well as conditional money transfers (UNDP, 2010c). Although educational achievement increased, the role the boarding schools or free transportation played is not clear.

In spite of government's efforts, the relatively low educational achievement of the population is a top challenge for the Turkish government in promoting socio-economic development. An undeniable factor is that Turkey has been spending less on education than the other case countries leaving the school sector relatively underfunded (see Fig. 37 below or Annex 18).

Figure 38 Public Spending on Education (% of GDP - trendlines)

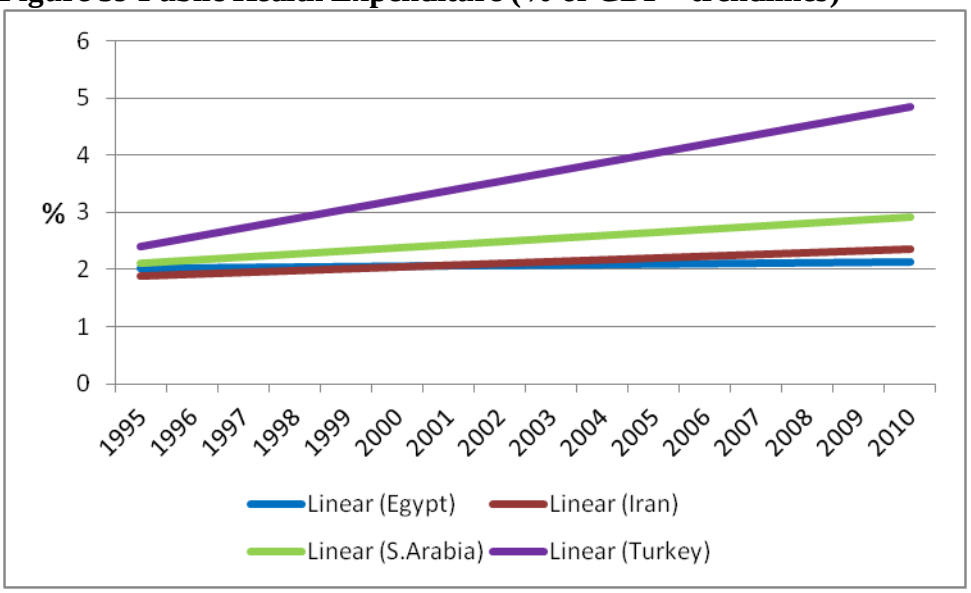


Source: WBp

[63] This explanation may not be easily verified empirically. Experience from Iran, where education is exclusively in Persian despite sizeable minorities, shows that other factors than the language of instruction may be of higher importance.

To the contrary, Turkey has had a good record in improving the health of the population. The introduction of universal health insurance in 2003 (UNDP, 2010c) amidst austerity measures and economic recovery confirms the government's commitment to expanding accessibility of healthcare. Among the case countries, Turkey has had the highest rate of public expenditure on health (see Fig. 39 below or Annex 19). By the end of the focus period, the immunization of children and child births in hospitals or attended by skilled medical staff are nearly universal (ibid). Good results in both life expectancy and child mortality testify to the long-term commitment of the Turkish government to improving the health of the population (see Fig. 19 and 20 in ch. 5.1).

Figure 39 Public Health Expenditure (% of GDP - trendlines)



Source: WBq, WBr

In Turkey, the progress in many of the indicators of socio-economic development has been slow. The fact, that Turkey had higher score at the beginning of the focus period is only part of the explanation. The lack of consistent government policy is another reason. The successive Turkish governments have been largely preoccupied with addressing the economic problems of the country. This was most visible in the era of structural adjustment in the 1980s when the elimination of fiscal deficits and foreign borrowing took precedence over human development. The

government supported by the military took active steps to suppress wages (e.g. by prohibiting work unions and strikes) in order to increase the competitiveness of Turkish exports, and to reduce imports and public expenditures (cf. Richards and Waterbury, 1996; Metin-Ozcan, Voyvoda and Yeldan, 2001. The charts in ch. 5.1 and the explanation above indicate that the situation started changing for the better in the late 1990s and in the 2000s, when changes in government policy both in the economy and in human development increased the level of socio-economic development in the country. This is visible in the trends of economic growth, inflation, expected years of schooling, literacy gap, and women's enrollment in secondary education or women's participation in the labor force.

5.2.4.3. Gender

There has been persistent gender disparity over the focus period, and Turkey lags behind the remaining case countries, particularly in the educational sectors. Turkey ranks worst in the ratio of women enrolled in education relative to men and stands third behind Iran and Saudi Arabia in the literacy gap (see Fig. 24-28). This confronts with the fact, that Turkey had a high ratio of women enrolled in primary education already at the beginning of the measuring period and maintained highest female literacy among the case countries (see Annex 12). Although women have had better access to basic education in Turkey than in other case countries (at least as measured by literacy levels), their relative disadvantage when compared with men was the highest.

Turkey led the way in women's emancipation as it instituted obligatory school attendance already in the 1924 and made the achievement of women's literacy a national goal during the interwar period (El-Sanabiy, 1989). The efforts to improve women's education stagnated afterwards when compared with the remaining countries. The situation changed only in 1997, when the country increased compulsory education by three years as already mentioned. The result was the acceleration in the rise of the school enrollment ratio as it became obligatory for Turkish children to complete elementary school. This benefited mostly the girls who had been previously more likely to drop out after the fifth grade (UNDP, 2010c). The accelerated growth of female enrollment in secondary education since the late 2000s is likely an interrelated phenomenon as girls with completed elementary education could easily continue on to the high school (see Fig. 28, ch. 5.1). The improvement in

women's access to education was a major factor contributing to the rise in expected years of schooling in Turkey since the early 2000s (cf. UNDP, 2010c). As the data indicates, the gap in access to education has been narrowing particularly fast in the last decade. Nevertheless, gender disparity in education persists in spite of government efforts to eradicate it.

In terms of employment opportunities, Turkish women have been better off than their counterparts in other case countries as shown by their higher participation in the labor force. However, the trend in women's labor participation has been opposite. Whereas in Saudi Arabia and Iran the number of working women was on the increase during the 1990s, in Turkey the rate was decreasing (see Fig. 34, ch. 5.1). The economic turmoil of the period is the likely culprit as unemployment was rising (superimpose the curve in Fig. 34 with the development of Turkish GDP per capita in Fig. 15 to see the correlation of women's employment with the cycles in the Turkish economy). When the economy improved in the second half of the 2000s, women's employment picked up. However, as the World Bank points out, education remains to be a problematic factor in increasing the employment opportunities for women. Religious education and general high school with limited vocational and practical training have absorbed a large share of the growth in women's enrollment in secondary education (WB, 2003a).

In 2008, the government started paying employer's share of social security payments for female employees to increase the willingness of the private sector to employ women (UNDP, 2010c). Unlike the other case countries, which either miss a policy supportive of women's employment (Iran and Egypt) or are directly hostile to the idea (e.g. Saudi Arabia), the Turkish government plays a very proactive role in the employment aspect of gender equality.

In terms of legal status, women are equal to men in most aspects of life, including family law (e.g. women have equal rights in shared property, child custody and divorce), inheritance (women are entitled to equitable share) and nationality (e.g. children of Turkish women receive Turkish citizenship regardless of their father's nationality; WB, 2003a). Only Tunisia comes close in the rights it affords to the women. In addition, Turkey is also one of the three countries (the other ones being Bahrain and Tunisia) that allows abortion on request (UN DESAd).

Among the Muslim countries of the broader Middle East, Turkey is unique in granting equal rights to women. It can also boast of having the longest history of government efforts to enhance the socio-economic status of women, particularly in education. Within this context, the results of Turkish policy of promoting gender equality in education and labor force participation have been disappointing. Other countries in the focus region, including extremely conservative countries such as Iran, Qatar, Saudi Arabia or the United Arab Emirates have achieved better results in many of the indicators of gender equality.

6. Conclusion

The four case countries present the various impacts of political and economic transformations on socio-economic development in the region of the broader Middle East. The thesis shows that government policy is paramount to development with external factors and natural resources playing only secondary role in the sense that governments through their action determine how the factors outside of their control influence the economy, or quality of life in the individual countries. Obviously, factors like a foreign invasion and a prolonged armed conflict or vast natural riches have a decisive impact on socio-economic development, the governments still have maneuvering space to implement policies that limit the negative impacts of external pressures, or use resource rents to the greater benefit of the countries and societies. On the other hand, inappropriate policies can exacerbate existing problems or waste opportunities afforded by windfalls of money.

In coherence with the above-mentioned finding, the thesis shows that it is possible for countries with negligible mineral resources to achieve a comparatively high level of economic development within the context of the Middle East. Turkey is an outstanding example. Throughout the focus period the country maintained its position of the largest economy in the Middle East extensively relying on trade and the export of manufactured goods. After a period of implementing ISIs, the country gradually liberalized its trade, finances, and production greatly benefiting from the country's position as a land bridge between Europe and the Middle East. Despite multiple challenges, including largely pro-cyclical monetary and fiscal policy of the successive governments, Turkey kept adjusting its policies in order to overcome its economic problems.

Further, the thesis confirms the possibility of promoting socio-economic development even at adverse external conditions and economic problems. Iran is the best example from among the case countries. Amidst open warfare with neighboring Iraq, international isolation, and contracting economy the country managed to achieve the fastest improvement in various indicators of human development (mainly education and gender). The country maintained a strong commitment to extend government services to areas and people that had been largely left out of previous development programs.

Considering the vast variation in the conditions of the case countries, it is not an easy task to provide a specific list of factors that determine the success or failure of government policy in fostering development. In general, it is possible to conclude that a genuine commitment of the government is the single most important factor. The governments need to actively seek to bridge the gap between the level of human development of cities and rural areas by providing government services in marginalized areas and to disadvantaged groups (above all women). The resources committed to such a task need to be equivalent to the challenge. Both Iran and Egypt had a similar level of human development 40 to 50 years ago and committed to improving health and education in their countries. The situation is largely different today. While Iran built schools and health centers in almost every village of the country, in Egypt pockets of poverty and ill-health prevail in areas with only scant government services and infrastructure. The right ordering of priorities is also important. In Egypt, the rapid expansion of higher education at a time, when elementary schools were lacking and illiteracy was rampant exhausted government resources before the basic needs for education of the whole society were met. The commitment of the government proves itself in times of crisis. Iran and Saudi Arabia kept a high level of education and healthcare expenditures amidst dwindling revenues, Iran during the 1980s and Saudi Arabia during the 1980s and 1990s. Both countries could have been tempted to sacrifice social spending in the name of more pressing needs (e.g. to overcome the military threats both countries were facing at the times), but the need for long-term development prevailed.

The need for government commitment and for a right set of development priorities is true not only in the matters of human development but also in the economy. The thesis points at the experience of economic reform in Egypt and Turkey. Whereas Turkey remained committed to the reforms prescribed by the Bretton Woods institutions despite ongoing economic and social problems, Egypt implemented the reforms only partially fearing the response from the street. The low level of manufacturing and high unemployment in Egypt can be at least partly tracked to the differences in the implementation of economic liberalization in the two countries.

The importance of choosing the right priorities for economic policies is manifested in the industrialization policies of Iran and Turkey on one hand and Saudi

Arabia on the other. During the 1960s and 1970s all of the abovementioned countries intervened extensively in the economies providing subsidies and protection from competition. Iran and Turkey invested heavily in labor-intensive industries to cover the domestic demand for consumer items while using locally available labor force and later inputs. The range of production expanded gradually along with the growing expertise of the local companies and labor. On the other hand, Saudi Arabia invested heavily in capital-intensive industries using foreign expertise and labor without creating backward or forward linkages to other areas of the domestic economy. Today, both Iran and Turkey boast of large and diversified manufacturing sectors that contribute towards employment and exports (although in Iran the share of manufactured goods in export is dwarfed by the size of oil exports). The manufacturing sector in Saudi Arabia remains negligible and the existing industries are dominated by foreign management and labor force forging only limited spillover effect on other sectors of the economy.

The aim of this thesis was to assess the implications of political and economic transformation for development in the broader region of the Middle East. The thesis provided a thorough analysis of socio-economic development and its interdependence on government policy and external factors making relevant conclusions. Thus, the aim of this thesis was met

7. Summary

The region of the broader Middle East has gone through a variety of economic and political transformations that have greatly altered the level of socio-economic development of the countries. This thesis analyses the causality between those transformations and development with a particular focus on the role of government policy. In order to do so, the thesis first defines key concepts such as human development, socio-economic development, transformation, and reform. Key indicators of socio-economic development are selected and their relation to the various aspects of development (e.g. economy, health, education, gender) is established. Based on the analysis of the indicators the thesis defines periods of interest for the case countries, when most significant changes in the pattern of development took place. Those periods are linked to particular changes in government policy and external factors.

The thesis observes that government policy plays the most significant role in fostering socio-economic development. Regardless of the absence of natural resources and external factors, countries can enhance socio-economic development through appropriate government policies, while natural riches and favorable external relations do not guarantee progress in economic or human development, when government commitment is lacking. Within the realm of government policy, the efforts to bridge the gap between the level of human development of cities and rural areas by providing government services in marginalized areas and to disadvantaged groups (above all women) have proved to be particularly successful in fostering socio-economic development.

Shrnutí česky

Region Blízkého východu prošel ve druhé polovině 20. století řadou ekonomických a politických transformací, které značně ovlivnily úroveň dosaženého socioekonomického rozvoje jednotlivých zemí. Tato práce se věnuje analýze kauzality těchto transformací s rozvojem, přičemž se zaměřuje na roli vládních politik. Práce napřed definuje podstatné koncepty, jako je lidský rozvoj, socioekonomický rozvoj a transformace. Dále pak jsou vybrány indikátory socioekonomického rozvoje a práce definuje jejich vztah k různým aspektům rozvoje (tj. hospodářství, zdraví, vzdělání a gender). Na základě analýzy těchto indikátorů pak práce identifikuje klíčová období, kdy došlo k nejvýznamnějším změnám v rozvoji studovaných zemí. Tato období jsou dána do souvislosti se změnami ve vládních politikách a vnějších faktorech.

Zásadním zjištěním práce je, že vládní politiky jsou nejdůležitějším faktorem socioekonomického rozvoje. I přes nedostatek přírodních zdrojů a nepříznivé vnější podmínky mohou země dosáhnout socioekonomického rozvoje prostřednictvím vhodných politik. Na druhou stranu, nerostné bohatství a příznivá zahraniční situace nezaručuje pokrok v ekonomice nebo lidském rozvoji. Práce dále shledává, že politiky snižování nerovnosti mezi městy a venkovskými oblastmi zaměřené na poskytování služeb v marginalizovaných oblastech a znevýhodněným jedincům (především ženám) jsou nejvhodnějším nástrojem k prosazování socioekonomického rozvoje jednotlivých zemí.

List of References

Abrahamian, Ervand. *A History of Modern Iran*. Cambridge University Press, 2008.

Abu-Zeid, M.A. and F. Z. El-Shibini: 'Egypt's High Aswan Dam.' *Water Resources Development* 13.2 (1997): 209–217. http://www.ci.uri.edu/CIIP/fallclass/Docs_2006/UrbanWaterfronts/Abu-Zeid%20and%20El-Shibini.pdf [20-5-2013].

Achoui, Mustapha M. 'Human resource development in Gulf countries: an analysis of the trends and challenges facing Saudi Arabia' *Human Resource Development International* 12.1 (February 2009): 35–46. www.tandfonline.com/doi/pdf/10.1080/13678860802638826 [10-3-2013].

AfDB – African Development Bank. *Arab Republic of Egypt Structural Adjustment Loan 1991-1994 Project Completion Report 1999-2001*, 1999. http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/ADB-BD-IF-99-130-EN-EGYPT-PCR-SAL.PDF [28-4-2013].

Afkhami, Mahnaz, and Erika Friedl. *In the Eye of the Storm: Women in Post-revolutionary Iran*. Great Britain: Syracuse University Press, 1994.

Agoston, Gabor and Bruce Masters. *Encyclopedia of the Ottoman Empire*. New York: Infobase Publishing, 2009. http://books.google.cz/books/about/Encyclopedia_of_the_Ottoman_Empire.html?id=QjzYdCxumFcC&redir_esc=y [15-4-2013].

Ajami, Fouad. 'Retreat from Economic Nationalism: The Political Economy of Sadat's Egypt' *Journal of Arab Affairs* 1.1 (1981): 27-52.

Akgun, Birol. 'Aspects of Party System Development in Turkey.' *Turkish Studies* 2.1 (2001): 71- 92. *Academic Search Complete*, EBSCO*host* [8-3-2013].

Alizadeh, Parvin, ed. *The Economy of Iran: The Dilemma of an Islamic State*. London: I.B. Tauris, 2000.

Aljazeera. '*Low turnout in Saudi Arabia's local polls*.' 22 Oct 2011. http://www.aljazeera.com/news/middleeast/2011/09/20119298149855126.html [30-4-2013].

Al-Rasheed, Madawi. *A History of Saudi Arabia*. Cambridge University Press, 2002.

Amuzegar, Jahangir. 'Iran's Economy Facing a Challenging Year' *Middle East Economy Survey*, 8 Apr 2013. http://www.mees.com/en/articles/7347-iran-s-economy-facing-a-chalenging-year [20-5-2013].

Anand, S. and Sen, A. 'Human Development and Economic Sustainability' *World Development*, 28.12 (2000): 2029-2049.

http://www2.econ.iastate.edu/classes/tsc220/hallam/Readings/AnandSenHumanDevelopmentEconomicSustainability.pdf [27-4-2013].

Ansari, Ali M. ‘The Myth of the White Revolution: Mohammad Reza Shah, 'Modernization' and the Consolidation of Power’ *Middle Eastern Studies* 37.3 (Jul. 2001): 1-24. *Jstore.org* [29-4-2013].

Ansari, Ali M. *Modern Iran Since 1921, The Pahlavis and After*. Harlow: Pearson Educaton, 2003.

AQUASTATa. Country Profiles. FAO. 2013. http://www.fao.org/nr/water/aquastat/main/index.stm [27-2-2013].

AQUASTATb. Country Fact Sheets. FAO. 2013. http://www.fao.org/nr/water/aquastat/main/index.stm [27-2-2013].

Arte TV. ‘1971. Les fastes du Shah d'Iran à Persépolis’ *Mystères d’Archives* 20 Aug. 2011. http://www.arte.tv/fr/1971-les-fastes-du-shah-d-iran-a-persepolis/3984488,CmC=4076664.html [29-4-2013].

Askari, Hossein and Shohreh Majin. ‘Recent Economic Growth in Iran’ *Middle Eastern Studies* 12.3 (1976): 105-124.

Avery, Peter; G.R.G. Hambly; and C.P. Melville. ‘From Nadir Shah to the Islamic Republic’ in *The Cambridge History of Iran*. Vol. 7. Cambridge University Press, 1993.

Bahmani-Oskooee, Mohsen. ‘History of the Rial and Foreign Exchange Policy in Iran’ *Iranian Economic Review* 10.14 (Fall 2005): 1-20. http://journals.ut.ac.ir/page/download-Y9DTOGFf6mI.artdl [13-5-2013].

Barke, Michael and O'Hare, Greg. *The Third World Conceptual Frameworks in Geography*. Edinburgh: Oliver & Boyd,1991.

Behdad, Sohrab and Farhad Nomani. ‘Workers, Peasants, and Peddlers: A Study of Labor Stratification in the Post-Revolutionary Iran’ *International Journal of Middle East Studies* 34.4 (Nov. 2002): 667-69. *Jstore.org* [10-5-2012].

Borowiec, Andrew. *Modern Tunisia: a Democratic Apprenticeship*. Westport, CT: Praeger Publishers, 1998.

Bozkurt, Abdullah. ‘Turkey Criticized for Not Signing Charter on Minority Languages.’ *Today Zaman*. 23 June 2010. http://www.todayszaman.com/newsDetail_getNewsById.action?load=detay&link=213939 [23-5-2013].

BP – British Petroleum. ‘Historical Data’. *Statistical Review*, n.d. http://www.bp.com/sectionbodycopy.do?categoryId=7500&contentId=7068481 [7-5-2013].

Brown, Amber, and Marty D. Matlock. ‘A Review of Water Scarcity Indices and Methodologies’ *White Paper 106*. The Sustainability Consortium – University of Arkansas, Apr. 2011. http://www.sustainabilityconsortium.org/wp-content/themes/sustainability/assets/pdf/whitepapers/2011_Brown_Matlock_Water-Availability-Assessment-Indices-and-Methodologies-Lit-Review.pdf [27-2-2013]

Brumberg, Daniel. ‘Iran’s Successes and Failures – 34 Years Later.’ *The Iran Primer*, 9 Feb. 2013. http://iranprimer.usip.org/blog/2013/feb/09/iran%E2%80%99s-successes-and-failures-34-years-later [15-3-2013].

Bush, George W. ‘State of the Union Address’ Washington, D.C.; The White House, 29 Jan. 2002. Presidential address.

Calis, Saban. *Turkey’s Integration with Europe: Initial Phase Reconsidered. Center for Strategic Research* (working paper). 2012 http://sam.gov.tr/wp-content/uploads/2012/01/Saban-Calis.pdf [17-3-2012].

Carnegie Endowment for International Peace Arab Political Systems. *Baseline Information and Reforms – Saudi Arabia*. www.carnegieendowment.org/files/Saudi_Arabia_APS.doc [8-3-2013].

Caron, David. ‘The Reconstruction of Iraq: Dealing with Debt’. 11 U.C. Davis J. International Law & Policy 123, 2004. http://scholarship.law.berkeley.edu/facpubs/92 [12-5-2013].

Carey, Glen, and Zainab Fattah. ‘Saudi King Boosts Housing, Job Spending Amid Mideast Unrest.’ *Bloomber.com*, 23 Feb. 2011. http://www.bloomberg.com/news/2011-02-23/king-abdullah-pours-money-into-saudi-housing-welfare-amid-regional-unrest.html [21-5-2013].

CBS News – ‘Egyptians Riot in the Streets in 1977.’ *60 Minutes Rewind*. CBS Broadcasting, 4 Feb. 2011. www.cbsnews.com/8301-504803_162-20030615-10391709.html [28-4-2013].

Celasun, Oya. ‘The 1994 Currency Crisis in Turkey.’ Development Research Group – The World Bank, 1998. http://elibrary.worldbank.org/content/wb/wps4301/1999/00000001/00000001/art01913 [22-3-2013].

CIA – The World Factbook. https://www.cia.gov/library/publications/the-world-factbook/geos/af.html [8-3-2013].

Constantino, Renato R.. 'Nothing New in the World.' *Asian Times*, 15 Sep. 2004. http://www.atimes.com/atimes/Middle_East/FI15Ak03.html [29-4-2013].

Creative Commons. *Arab League (orthographic projection)*. Map. Wikimedia. 11 Nov. 2011a. http://upload.wikimedia.org/wikipedia/commons/7/73/Arab_League_%28orthographic_projection%29_updated.svg [25-2-2013].

Creative Commons. *Western Asia (orthographic projection)*. Map. Wikimedia, 13 Apr. 2011b. http://upload.wikimedia.org/wikipedia/commons/3/37/Western_Asia_%28orthographic_projection%29.svg [26-2-2013].

Daly, M. W., ed. 'Modern Egypt from 1517 to the End of the Twentieth Century.' *The Cambridge History of Egypt*, Vol. 2. Cambridge University Press, 1998. http://books.google.cz/books/about/The_Cambridge_History_of_Egypt.html?id=CTi_maJ7lPIC&redir_esc=y [3-4-2013].

Daniel, Elton L. *The History of Iran*. Santa Barbara, CA: ABC-CLIO, 2012.

Diwan, Ishac, John Underwood, and Lynn Squire. *External Finance in the Middle East: Trends and Prospects*. Middle East and North Africa Department – The World Bank, Dec. 1993. http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/MENAEXT/0,,contentMDK:20245840~menuPK:508886~pagePK:146736~piPK:226340~theSitePK:256299,00.html [21-3-2013].

Dowd, Kevin. 'The Costs of Inflation and Disinflation' *Cato Journal* 14.2 (Fall 1994): 305-331. http://www.cato.org/sites/cato.org/files/serials/files/cato-journal/1994/11/cj14n2-8.pdf [28-3-2013].

Dodd, Rebecca, and Lise Munck. *Dying for Health, Poor people's experience of health and ill-health*. World Bank and the World Health Organization, 2002. www.who.int/hdp/publications/dying_change.pdf [16-4-2013].

The Economist. *Democracy Index 2010*. The Economist Intelligence Unit, 2010. http://graphics.eiu.com/PDF/Democracy_Index_2010_web.pdf [4-3-2013].

EIA – US Enenrgy Information Administration. *International Energy Statistics*. http://www.eia.gov/countries/data.cfm#undefined [27-2-2013].

El-Ghonemy, M. Riad. *Affluence and Poverty in the Middle East*. London: Routledge, 1998.

El-Sanabiy, Nagat. *Determinants of Women's Education in the Middle East and North Africa. Illustrations from Seven Countries*. Education and Employment Division Population and Human Resources Department – World Bank, May 1989.

http://books.google.cz/books/about/Determinants_of_Women_s_Education_in_the.html?id=DZ1ctwAACAAJ&redir_esc=y [22-3-2013].

Elveren, Adem Y. and Muhsin Kar. *Turkey's Economic Integration into the EU: Challenges and Opportunies*. University of Utah – Department of Economics, 2005. http://www.academia.edu/1613307/Turkeys_Economic_Integration_into_the_EU_Challenges_and_Opportunities_ [9-3-2013].

ESCWA – Economic and Social Commission for Western Asia. *Foreign Direct Investment Report*. Technical paper. United Nations, 2008. www.arab-hdr.org/publications/other/escwa/foreign-investment-08e.pdf [21-5-2013] .

Esfahani, Hadi Salehi, and M. Hashem Pesaran. 'The Iranian Economy in the Twentieth Century: A Global Perspective' *Iranian Studies* 42.2 (2009): 177-211. *Academic Search Complete*, EBSCO*host* [10-3- 2013].

Fisher, W. William Bayne, P. Avery, G. R. G. Hambly, and C. Melville, ed. *The Cambridge History of Iran*, Vol. 7. Cambridge University Press, 1991.

Flamming, Robert A. 'Economic Growth and Economic Development: Counterparts or Competitors?' *Economic Development and Cultural Change* 28.1 (Oct. 1979): 47-61. http://www.jstor.org/stable/1153267 [10-4-2013].

Freedom House. *Freedom in the World 2010*. http://www.freedomhouse.org/report/freedom-world/freedom-world-2010 [4-3-2013].

Freedom House. *Freedom in the World 2013*. http://www.freedomhouse.org/report/freedom-world/freedom-world-2013 [5-3-2013].

Friends of the Earth. *ISEW explained*. www.foe.co.uk/progress/java/ServletStoryISEW [14-4-2013].

Fromking, David. 'The Great Game in Asia.' *Foreign Affairs*. Council on Foreign Relations, 1980. http://www.foreignaffairs.com/articles/33619/david-fromkin/the-great-game-in-asia [29-4-2013].

Gasiorowski, Mark J. and Malcom Byrne (ed.). *Mohammad Mosaddeq and the 1953 Coup in Iran*. Syracuse University Press, 2004.

Girgis, Monique. 'Women in Pre-revolutionary, Revolutionary and Post-revolutionary Iran.' *Iranian Society*. Iran Chamber Society, 1996. http://www.iranchamber.com/society/articles/women_prepost_revolutionary_iran1.php [23-5-2013].

Glennie, Jonathan. 'Cuba: A development model that proved the doubters wrong.' *The Guardian,* 5 Aug. 2011. http://www.guardian.co.uk/global-development/poverty-matters/2011/aug/05/cuban-development-model [15-3-2013].

Gurbuz, Vedat. 'The Iranian Revolution.' University of Ankara, n.d. http://dergiler.ankara.edu.tr/dergiler/42/463/5278.pdf [6-5-2013]

Hanmer, Lucia, Robert Lensink, and Howard White. 'Infant and Child Mortality in Developing Coutnries: Analysing the Data for Robust Determinants.' Institute of Development Studies, 2002. http://www.ids.ac.uk/idspublication/infant-and-child-mortality-in-developing-countries-analysing-the-data-for-robust-determinants [17-4-2013].

Hansen, Bent. *The Political Economy of Poverty, Equity, and Growth. Egypt and Turkey*. Oxford University Press, 1991.

Heritage Foundation. *2010 Index of Economic Freedom*. http://www.heritage.org/index/explore?view=by-region-country-year [7-3-2013]

Hershlag, Z.Y. 'Ataturk's Etatism.' Ed. Landau, J.M., *Atatürk and the Modernization of Turkey*. Boulder: West View Press, 1984.

Hicks, N., and P. Streeten. 'Indicators of Development: The Search for a Basic Needs Yardstick' *World Development* 7.6 (1979): 567-580. www.sciencedirect.com/science/article/pii/0305750X79900937 [4-3-2013].

Hourani, Albert. *A History of the Arab Peoples*. Harvard University Press, 2010.

Human Rights Watch. *Perpetual Minors, Human Rights Abuses Stemming from Male Guardianship and Sex Segregation in Saudi Arabia*. 2008. http://www.hrw.org/reports/2008/04/19/perpetual-minors [24-5-2012].

Gelvin, James L. *The Modern Middle East: A History*. New York: Oxford University Press, 2008.

IBRD – International Bank for Reconstruction and Development. *Present Economic Position and Prospects of the United Arab Republic*. Department of Operations South Asia and Middle East, 1959. Web. [21-3-2013].

ICG – International Crisis Group. 'Spider Web: The Making and Unmaking of Iran Sanctions' *Middle East Report* 138 (25 February 2013): n.p. http://www.crisisgroup.org/en/regions/middle-east-north-africa/iraq-iran-gulf/iran/138-spider-web-the-making-and-unmaking-of-iran-sanctions.aspx [28-2-2013].

ICS – Iran Chamber Society. 'Oil Nationalization.' *History of Iran*., n.d. http://www.iranchamber.com/history/oil_nationalization/oil_nationalization.php [19-5-2013].

Iran Human Rights Documentation Center. *The Constitution of the Islamic Republic of Iran*. http://www.iranhrdc.org/english/english/human-rights-documents/iranian-codes/3017-the-constitution-of-the-islamic-republic-of-iran.html?p=5#.UTuKSle6x6w [9-3-2013].

IRDC – Iran Revolution Document Center. 'The change of Iranian solar calendar from Islamic hijri to Imperial calendar.' http://www.irdc.ir/en/calendar/298/default.aspx [29-4-2013].

Issawi, Charles. 'Population and Wealth in Egypt' *The Milbank Memorial Fund Quarterly* 27.1 (Jan. 1949): 98-113. http://www.jstor.org/stable/3348065 [10-5-2012].

Karam, Souhail. 'Saudi Arabia Scraps Wheat growing to Save Water.' Reuters, 8 Jan. 2008. http://www.reuters.com/article/2008/01/08/idUSL08699206 [20-5-2013].

Karbassian, Akbar. 'Islamic Revolution and the Management of the Iranian Economy' *Social Research* 67.2 (Summer 2000): 621-640. http://www.jstor.org/discover/10.2307/40971487?uid=3737856&uid=2129&uid=2&uid=70&uid=4&sid=21102048944533 [10-3-2013].

Karl, Terry L. 'Oil-Led Development: Social, Political, and Economic Consequences.' *Encyclopedia of Energy*, Vol. 4. Elsevier, 2004: 661-672.

Kasaba, Resat, ed. 'Turkey in the Modern World' in *The Cambridge History of Turkey*, Vol. 4. Cambridge University Press, 2008.

Kassem, Maye. *Egyptian Politics, the Dynamics of Authoritarian Rule*. Boulder, Colorado: Lynne Rienner Publishers, 2004.

Kerr, Malcom H. 'Rich and Poor in the New Arab Order' *Journal of Arab Affairs*. 1.1 (1981): 1-26.

Khaliq, Amir A. 'Saudi Healthcare System: A View from the Minaret' *World Health and Population*. 13.3 (April 2012): 52-64. http://www.longwoods.com/content/22875 [24-5-2012].

Khatib, Ahmad M. 'Oil and Infrastructure Expenditures in Saudi Arabia' *Journal of Business Studies Quarterly* 4,2 (2012): 72-76.

Kinzer, Stephen. *All the Shah's Men, An American Coup and the Roots of Middle Ester Terror*. Hoboken, NJ: John Wiley & Sons, 2003.

Knauerhase, Ramon. 'Saudi Arabia's economy at the beginning of the 1970's' *Middle East Journal* 28.2 (1974): 126-140.

Komlos, John, and Brian Snowdon.. 'Measures of Progress and Other Tall Stories From Income to Anthropometrics' *World Economics* 6.2 (Apr.–Jun. 2005): n.p. http://www.world-economics-journal.com/Contents/ArticleOverview.aspx?ID=209 [15-3-2013].

Krimly, Rayed. 'The Political Economy of Adjusted Priorities: Declining Oil Revenues and Saudi Fiscal Policies' *Middle East Journal* 53.2 (Spring 1999): 254-267.

Ladier-Fouladi, Marie. 'The Fertility Transition in Iran' *Population: An English Selection* l.9 (1997): 191-213. *Jstore.org* [10-5-2012].

Licari, Joseph. 'Economic Reform in Egypt in a Changing Global Economy.' Working Paper 129. OECD Development Center, Dec. 1997. http://www.oecd-ilibrary.org/economic-reform-in-egypt-in-a-changing-global-economy_5lgsjhvj7clw.pdf;jsessionid=q1f3a1my04ny.delta?contentType=/ns/WorkingPaper&itemId=/content/workingpaper/132382274657&containerItemId=/content/workingpaperseries/18151949&accessItemIds=&mimeType=application/pdf [15-3-2013].

Looney, Robert E. and P.C. Frederiksen. 'The Evolution and Evaluation of Saudi Arabian Economic Planning' *Journal of South Asian and Middle Eastern Studies* 9.2 (Winter 1985): 3-19.

Looney, Robert E. 'Oil Revenues and Dutch Disease in Saudi Arabia: Differential Impacts on Sectoral Growth' *Canadian Journal of Development Studies* 9.1. (1990): 119-134.

Maddison, Angus. *The World Economy in Millennial Perspective*, Paris: OECD, 2001. http://www.oecd.org/dev/developmentcentrestudiestheworldeconomyamillennialperspective.htm [3-4-2013].

Maddison, Angus. 'Maddison Historical GDP Data.' *World Economics*. http://www.worldeconomics.com/Data/MadisonHistoricalGDP/Madison%20Historical%20GDP%20Data.efp [12-3-2013].

Mango, Andrew. *Ataturk*. London: John Murray Publishers, 2004.

Marshall, Shana, and Joshua Stacher. 'Egypt's Generals and Transnational Capital' *Middle East Report* 42.262 (Spring 2012): n.p. Middle East Research and Information Project. http://www.merip.org/mer/mer262/egypts-generals-transnational-capital [10-3-2013].

McGillivray, Mark. 'The Human Development Index: Yet Another Redundant Composite Development Indicator?' *World Development* 19.10 (1991): 1461-1468. www.ophi.org.uk/wp-content/uploads/Mc-Gillivray-1991.pdf [22-4-2013].

Metin-Ozcan, Kivilcim, Ebru Voyvoda and A. Erinc Yeldan. 'Dynamics of Macroeconomic Adjustment in a Globalized Developing Economy: Growth, Accumulation and Distribution, Turkey 1969-1999' *Canadian Journal of Development Studies* 12.1 (2001): 219-254.

Miller, Riel. 2007. *Education and Economic Growth: From the 19th to the 21st Century*. CISCO. http://www.cisco.com/web/strategy/docs/education/eeg_what_research_says.pdf [17-4-2013].

MIT – Massachusetts Institute of Technology. *The Observatory of Economic Complexity*. http://atlas.media.mit.edu/ [4-3-2013].

NCD (Non-Communicable Diseases) Alliance. *Non-communicable Diseases: A Priority for Women's Health and Development*. 2011. http://www.who.int/pmnch/topics/maternal/20110304_ncd_unreport/en/ [21-4-2013].

Neumayer, Eric. 'On the methodology of ISEW, GPI and related measures: some constructive suggestions and some doubt on the 'threshold' hypothesis.' *Ecological Economics* 34 (2000): 347–361. http://www2.lse.ac.uk/geographyAndEnvironment/whosWho/profiles/neumayer/pdf/Article%20in%20Ecological%20Economics%20(ISEW).pdf [27-3-2013].

Niblock, Tim, and Monica Malik. *The Political Economy of Saudi Arabia*. London: Routledge, 2007.

OECD. 2002. 'Macroeconomic Developments: From Crisis to Recovery' in *OECD Economic Surveys: Turkey 2002*. OECD Publishing. http://dx.doi.org/10.1787/eco_serveys-tur-2002-3-en [2-3-2013].

OECD. 2006. 'Turkey's Challenges to Achieving a Sustainable Catching-up' in *OECD Economic Surveys: Turkey 2006*. OECD Publishing. http://dx.doi.org/10.1787/eco_surveys-tur-2006-3-en [2-3-2013].

OECD. 2008. 'New Challenges Facing Turkish Economy' in *OECD Economic Surveys: Turkey 2008*. OECD Publishing. http://dx.doi.org/10.1787/eco_surveys-tur-2008-3-en [2-3-2013].

OECDa. 'Life Expectancy.' *Glossary of Statistical Terms.* http://stats.oecd.org/glossary/detail.asp?ID=1530 [17-4-2013].

OECDb. ‘Literate Person.’ *Glossary of Statistical Terms.* http://stats.oecd.org/glossary/detail.asp?ID=1537 [17-4-2013].

OPEC. ‘OPEC Share of World Crude Oil Reserves 2011.’ *Data/Graphs*, 2012. http://www.opec.org/opec_web/en/data_graphs/330.htm [25-2-2013].

OPECa. *World proven crude oil reserves by country, 1960-2011*. http://www.opec.org/library/Annual%20Statistical%20Bulletin/interactive/current/FileZ/XL/T31.HTM [27-2-2013].

Owen, E. Roger. ‘One Hundred Years of Middle Eastern Oil in Middle East Brief.’ Crown Center for Middle East Studies. Brandeis University, 2008. http://www.brandeis.edu/crown/publications/meb/MEB24.pdf [25-2-2013].

Owen, Roger and Sevket Pamuk. *A History of Middle East Economies in the Twentieth Century*. London: I. B. Tauris Publishers, 1998.

PKF. 2002. *Saudi Arabia Tax Guide*. PKF – A Global Network of Independent Accounting Firms. http://www.pkf.com/publications/tax-guides/saudi-arabia-pkf-tax-guide [21-5-2013].

Ramazani, Rouhollah K. ‘Iran's ‘White Revolution’: a Study in Political Development.’ *International Journal of Middle East Studies* 5.2 (Apr. 1974): 124-139. *Cambridge Journals* [13-4-2013].

Ranis, Gustav, and Stephan Kosack. *Growth and Development in Cuba’s Transition*. Institute for Cuban and Cuban-American Studies – University of Miami, 2004. http://ctp.iccas.miami.edu/Research_Studies/GRanis_SKosack.pdf [15-4-2013].

Reinhart, Carmen M. and Miguel A. Savastano. ‘The Realities of Modern Hyperinflatio.’ *Finance & Development* (June 2003): 20-23. www.imf.org/external/pubs/ft/fandd/2003/06/pdf/reinhard.pdf [16-4-2013].

Reuters. ‘Saudi Arabia is spending more than it should – IMF.’ 7 Aug. 2012. http://www.reuters.com/article/2012/08/07/saudi-imf-idAFL6E8J7ABJ20120807 [21-5-2013].

Rezun, Miron. *The Soviet Union and the Iran: Soviet Policy in Iran from the Beginnings of the Pahlavi Dynasty until the Soviet Invasion in 1941*. Leiden: Sijthoff & Noordhoff International Publishers, 1981. http://books.google.cz/books?id=vceInEkXX74C&redir_esc=y [26-4-2013].

Richards, Alan and John Waterbury. *A Political Economy of the Middle East*. 2nd ed. Boulder, Colorado: Westview Press, 1996.

Roe, Alan, Jayanta Roy, and Jayshree Sengupta. *Economic Adjustment in Algeria, Egypt, Jordan, Morocco, Pakistan, Tunisia, and Turkey*. Washington D.C.: The

Word Bank, 1989. http://econ.worldbank.org/external/default/main?pagePK=64165259&theSitePK=469372&piPK=64165421&menuPK=64166093&entityID=000178830_98101902091798 [21-3-2013].

Rogan, Eugene. *The Arabs, a History*. London: The Penguin Group, 2009.

Rostow, W. W. 'The stages of Economic Growth' *The Economic History Review*, New Series 12.1 (1959): 1-16. *Jstore.org* [7-4-2013].

Roudi-Fahimi, Farzaneh. 'Iran's Family Planning Program: Responding to a Nation's Needs.' Population Reference Bureau, Jun. 2002. http://www.prb.org/Publications/PolicyBriefs/IransFamilyPlanningProgram.aspx [20-5-2013].

Rutstein, Shea O. 'Factors associated with trends in infant and child mortality in developing countries during the 1990s' *World Health Organization Bulletin* 78.10 (Jan. 2000): n.p. http://www.scielosp.org/scielo.php?script=sci_arttext&pid=S0042-96862000001000011&lng=en&nrm=iso [24-4-2013].

Sala-i-Martin, Xavier and Elsa V. Artadi. *Economic Growth and Investment in the Arab World*. Working paper 0203-08. Department of Economics – University of Columbia, 2002. http://academiccommons.columbia.edu/catalog/ac:116661 [12-5-2012].

Salehi-Isfahani, Djavad. 'The Revolution and the Rural Poor' *Radical History Review* 105 (Fall 2009): 139-144. http://djavad.wordpress.com/2009/10/07/the-revolution-and-the-rural-poor/ [9-3-2013].

Saudi ARAMCO. *Saudi ARAMCO and its People, a History of Training.* N.d. http://www.saudiaramco.com/AramcoPeople#news%257C%252FAramcoPeople [24-5-2012].

Sayyid-Marsot, Afaf L. *Egypt in the Reign of Muhammad Ali*. Cambridge: Cambridge University Press, 1984.

Sayyid-Marsot, Afaf L. *A History of Egypt: From the Arab Conquest to the Present*. Cambridge: Cambridge University Press, 2007.

Sebai, Zohair A., Waleed a. Milaat, and Abdulmohsen A. Al-Zulaibani. 'Health Care Services in Saudi Arabia: Past, Present and Future' *Journal of Family and Community Medicine* 8.3 (Sep.-Dec. 2001): 19-23. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3439740/ [24-5-2013].

Sen, A. K. 'Mortality as an Indicator of Economic Success and Failure' *Economic Journal* 108.446 (Jan.1998): 1-25. *Jstore.org* [18-3-2013].

Sen, A., K. 'The possibility of social choice' *The American Economic Review* 89.3 (June, 1999): 349-378. *Jstore.org* [18-3-2013].

Shackmurove, Yochanan.. 'Economic Development in the Middle East.' Working paper 04-022. Penn Institute for Economic Research – University of Pennsylvania, 2004. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=548362 [10-5-2012].

SIPRI – Stockholm International Peace Research Institute. *The SIPRI Military Expenditure Database*. http://milexdata.sipri.org/ [21-5-2013].

Smith, Adam. *An Inquiry into the Nature and Causes of the Wealth of Nations*. 1784. Ed. S. M. Soares.. *MetaLibri Digital Library*, 29 May 2007. www.ibiblio.org/ml/libri/s/SmithA_WealthNations_p.pdf [18-4-2013].

Spatafora, Nikola, and Andrew Warner. *Macroeconomic Effects of Terms-of-Trade Shocks. The case of Oil Exporting Countries*. International Economics Department – The World Bank, Jan. 1995. http://econ.worldbank.org/external/default/main?pagePK=64165259&theSitePK=475520&piPK=64165421&menuPK=64166093&entityID=000009265_3970311121344 [21-3-2013].

Stevens, Philip, and Martin Weale. *Education and Economic Growth*. National Institute of Economic and Social Research, 2003. http://cee.lse.ac.uk/conference_papers/28_11_2003/martin_weale.pdf [17-4-2013]

Taylo, John. *Principles of Macroeconomics.* Boston: Houghton Mifflin Company, 2007. books.google.cz/books?isbn=061896763X [23-4-2013].

Terryn, Benedicte. *Measuring Literacy in Developing Countries from an International Perspective*. University of Auckland – Department of Statistics. http://www.stat.auckland.ac.nz/~iase/publications/3/TerrynI68.pdf [17-4-2013].

Tharamangalam, Joseph. The Development Debacle of Kerala, India. Political Economy for Environmental Planners. Royal Institute of Technology. Stockholm. Course paper, 2006. http://www.infra.kth.se/courses/1H1142/Kerala_Paper_4.pdf [15-4-2013].

Todaro, M. P., and S. C. Smith, *Economic Development*, Eighth Edition, New York: Addison Wesley, 2003.

UIS – UNESCO Institute for Statistics. 'National Adult Literacy Rates (15+).' http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx [15-3-2013].

UN. *The Millennium Development Goals Report 2011*. New York, 2011. www.un.org/millenniumgoals/11_MDG%20Report_EN.pdf [4-3-2012].

UN General Assembly. *Declaration on the Right to Development*. 1986. http://www.un.org/documents/ga/res/41/a41r128.htm [8-3-2013].

UN DESAa. 'World Population Prospects: The 2010 Revision.' Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat. http://esa.un.org/unpd/wpp/index.htm [26-2-2013].

UN DESAb. 'Annual Population by Five-Year Age Groups 1950-2010 - Both Sexes.' Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat. http://esa.un.org/unpd/wpp/Excel-Data/population.htm [11-3-2013].

UN DESAc. 'Saudi Arabia.' Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat. www.un.org/esa/population/publications/abortion/doc/saudiarabia.doc [21-5-2013].

UN DESAd. 'World Abortion Policies 2013.' Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat. http://www.un.org/en/development/desa/population/publications/policy/world-abortion-policies-2013.shtml [25-5-2013].

UNDPa. *Human Development Reports - Origins of the Human Development Approach***.** http://hdr.undp.org/en/humandev/origins/ [8-4-2-2013].

UNDPb. *Human Development Reports – Human Development Index.* http://hdr.undp.org/en/statistics/hdi/ [8-4-2-2013].

UNDPc. *Arab Development Challenges Report 2011 – Towards the Developmental State in the Arab Region*. United Nations Development Programme, Regional Centre for Arab States. Cairo. 2011. http://www.undp.org/content/undp/en/home/librarypage/hdr/arab-development-challenges-report-2011.html [4-3-2012].

UNDPd. 'GDP per capita (2005 PPP $)' and 'Human Development Index (HDI) value' in *International Human Development Indicators*. http://hdrstats.undp.org/en/indicators/ [17-4-2013].

UNDPe. 'Mean years of schooling (of adults, years).' *International Human Development Indicators*. http://hdrstats.undp.org/en/indicators/103006.html [24-4-2013].

UNDPf. 'Expected years of schooling (of children) (years).' *International Human Development Indicators*. http://hdrstats.undp.org/en/indicators/103006.html [24-4-2013].

UNDP. *Millennium Development Goals Report for the Kingdom of Saudi Arabia*. 2002. www.undp.org.sa/sa/documents/mdg/mdgr_sa_2005_english.pdf [4-5-2012].

UNDP. *Kingdom of Saudi Arabia -Human Development Report*. 2003. http://hdr.undp.org/en/reports/nationalreports/arabstates/saudiarabia/name,3274,en.html [4-5-2012].

UNDP. *The Second Millennium Development Goals Report of the Islamic Republic of Iran*. 2006. http://www.undp.org.ir/doccenter/mdgs/Iran%20MDGs%20Report%2006-English.pdf. [4-5-2012].

UNDP. *Egypt's Progress Towards Achieving the Millennium Development Goals*. 2010a. http://www.undp.org.eg/Default.aspx?tabid=77 [16-5-2013].

UNDP. *Egypt Human Development Report 2010*. 2010b. www.undp.org.eg/Portals/0/NHDR%202010%20english.pdf [4-5-2012].

UNDP. *Millennium Development Goals Report Turkey.* 2010c. http://www.mod.gov.tr/en/othpub/Millennium%20Development%20Goals%20Report%20Turkey%202010.pdf [4-5-2012].

UNDP. *Arab Development Challenges Report 2011: Towards the Developmental State in the Arab Region*. Cairo: Regional Center for Arab States, 2011. http://www.undp.org/content/undp/en/home/librarypage/hdr/arab-development-challenges-report-2011.html [4-5-2012].

UNESCO. 'Understandings of literacy' in *Education for All Global Monitoring Report 2006.* Paris: UNESCO Publishing, 2006. http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/efareport/reports/2006-literacy/ [17-4-2013].

UNESCO. World Atlas of Gender Equality in Education. Paris: UNESCO Publishing, 2012.

UNICEF. 'Maternal Health Care in Egypt 2010.' 2011. http://www.unicef.org/egypt/Eng_Maternal-health-brochure_22Feb11-FINAL.pdf. [22-5-2013].

UN STATSa 'Population, rate of increase, birth and death rates, surface area and density for the world, major areas and regions: selected years' in *Demographic Yearbook 2009 - 2010*, http://unstats.un.org/unsd/demographic/products/dyb/dyb2009-2010.htm [26-2-2013].

Wagner, Heather L. 2004. *The Division of the Middle East: The Treaty of Sevres*. New York: Chelsea House Publishers.

WBa – GNI per capita, Atlas method (current US$). World Bank Data. http://data.worldbank.org/indicator/NY.GNP.PCAP.CD [7-3-2013].

WBb – How we Classify Countries. World Bank Data. http://data.worldbank.org/about/country-classifications [7-3-2013].

WBc – Iran Overview. World Bank. http://www.worldbank.org/en/country/iran/overview [10-3-2013].

WBd – GDP (current US$). World Bank Data. http://data.worldbank.org/indicator/NY.GDP.MKTP.CD [7-3-2013].

WBe - Health Nutrition and Population Statistics. World DataBank. http://databank.worldbank.org/data/views/reports/tableview.aspx [14-3-2013].

WBf – Inflation, consumer price (annual %). World Bank Data. http://data.worldbank.org/indicator/FP.CPI.TOTL.ZG?page=4 [23-4-2013].

WBg - Mortality rate, under-5 (per 1,000 live births). World Bank Data. http://data.worldbank.org/indicator/SH.DYN.MORT [24-4-2013].

WBh - Ratio of female to male primary enrollment (%). World Bank Data. http://data.worldbank.org/indicator/SE.ENR.PRIM.FM.ZS [26-4-2013] .

WBi - Ratio of female to male secondary enrollment (%). World Bank Data. http://data.worldbank.org/indicator/SE.ENR.SECO.FM.ZS [26-4-2013].

WBj - Ratio of female to male tertiary enrollment (%). World Bank Data. http://data.worldbank.org/indicator/SE.ENR.TERT.FM.ZS [26-4-2013].

WBk - Life expectancy at birth, female (years). World Bank Data. http://data.worldbank.org/indicator/SP.DYN.LE00.FE.IN [26-4-2013].

WBl - Life expectancy at birth, male (years). World Bank Data. http://data.worldbank.org/indicator/SP.DYN.LE00.MA.IN [26-4-2013].

WBm - Maternal mortality ratio (modeled estimate, per 100,000 live births). World Bank Data. http://data.worldbank.org/indicator/SH.STA.MMRT [26-4-2013].

WBn - Labor participation rate, female (% of female population ages 15+). World Bank Data. http://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS [26-4-2013].

WBo - External debt stocks, public and publicly guaranteed (PPG) (DOD, current US$). World Bank Data. http://data.worldbank.org/indicator/DT.DOD.DPPG.CD?page=4 [11-5-2013].

WBp - Public spending on education, total (% of GDP). World Bank Data. http://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS [24-5-2013].

WBq - Health expenditure, total (% of GDP). World Bank Data. http://data.worldbank.org/indicator/SH.XPD.TOTL.ZS [24-5-2013].

WBr - Health expenditure, public (% of total health expenditure). World Bank Data. http://data.worldbank.org/indicator/SH.XPD.PUBL [24-5-2013].

WBs - GDP growth (annual %). World Bank Data. http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG [10-3-2013].

WB. *Arab Republic of Egypt: An Agricultural Strategy for the 1990s*. Agriculture Operations Division, 1992.

WB. *Education in the Middle East & North Africa: A Strategy Towards Learning for Development*. Washington, D. C.: World Bank Publications, 1999. www.worldbank.org/education/strategy/MENA-E.pdf [21-3-2013].

WB. *Bridging the Gender Gap in Turkey: A Milestone Towards Faster Socio-economic Development and Poverty Reduction*. Washington, D.C.: World Bank, 2003a. siteresources.worldbank.org/INTECAREGTOPGENDER/.../TurkeyCGA [22-3-2013].

WB. *Better Governance for Development in the Middle East and North Africa: Enhancing Inclusiveness and Accountability*. Washington, D.C.: World Bank, 2003b. web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/MENAEXT/EXTMNAREGTOPGOVERNANCE/0,,contentMDK:20261216~pagePK:34004173~piPK:34003707~theSitePK:497024,00.html [22-3-2013].

WB. *Gender and Development in the Middle East and North Africa - Women in the Public Sphere*. Washington, D. C.: The World Bank, 2004.

WHOa. 'Health and Development.' http://www.who.int/hdp/publications/en/index.html [16-4-2013].

WHOb. 'Child Mortality'. *Health statistics and health information systems*. http://www.who.int/healthinfo/statistics/mortality_child/en/ [16-4-2013].

WHOc. 'Women's Health'. Media Centre – Fact sheet No. 334 (November 2009). http://www.who.int/mediacentre/factsheets/fs334/en/ [21-4-2013].

WHO. 2009. *Women and health: today's evidence tomorrow's agenda*. http://www.who.int/gender/documents/en/ [21-4-2013].

WHO. 2010. *Country Cooperation Strategy for WHO and Egypt 2010–2014*. www.who.int/countryfocus/cooperation_strategy/ccs_egy_en.pdf [22-5-2013].

Wiseman, Alexander W., Abdullah Sadaawi and Naif H. Alromi. 'Educational Indicators and National Development in Saudi Arabia.' *Paper presented at the 3rd IEA International Research Conference18-20 September 2008 – Taipei City, Taiwan*. www.iea.nl/fileadmin/user.../IRC2008_Wiseman_Sadaawi_etal.pdf .[2013-5-24]

Wood, Steeven A.. 'Inflation.' *Macroeconomic Analysis*. Lecture 25. University of California, Berkley, n.d. http://emlab.berkeley.edu/users/webfac/wood/e100b_f06/e100b.shtml [18-4-2013]

Wright, Lawrence. *The Looming Tower: Al Qaeda and the Road to 9/11*. New York: Knopf, 2006.

Yousef, Tarik M. 'Development, Growth and Policy Reform in the Middle East and North Africa since 1950' *Journal of Economic Perspective* 18.3 (Summer 2004): 91–116. faculty.nps.edu/relooney/JEP_ME_3.pdf [7-4-2013].

Annexes

Annex 1 Overview of Countries

	Population in 1950 (1)	2010/1950 population	Population in 2010 (2)	% of total	Territory (3)	% of total
Country	thousands	%	thousands		sq km	
Egypt	21,514	377	81,121	16.2	1,002,000	6.6
Iran	17,414	425	73,974	14.8	1,628,750	10.7
S. Arabia	3,121	879	27,448	5.5	2,149,690	14.1
Turkey	21,238	343	72,752	14.5	783,562	5.2
Case countries total	**63,288**	403	**255,295**	**50.9**	**5,564,002**	**36.6**
Algeria	8,753	405	35,468	7.1	2,381,741	15.7
Bahrain	116	1,092	1,262	0.3	758	0.0
Iraq	5,719	554	31,672	6.3	435,244	2.9
Israel	1,258	590	7,418	1.5	22,072	0.1
Jordan	449	1,378	6,187	1.2	89,342	0.6
Kuwait	152	1,798	2,737	0.5	17,818	0.1
Lebanon	1,443	293	4,228	0.8	10,452	0.1
Libya	1,029	618	6,355	1.3	1,759,540	11.6
Mauritania	657	526	3,460	0.7	1,030,700	6.8
Morocco	8,953	357	31,951	6.4	446,550	2.9
Oman	456	610	2,782	0.6	309,500	2.0
oPt*	932	433	4,039	0.8	6,020	0.0
Qatar	25	7,037	1,759	0.4	11,607	0.1
Sudan**	9,190	474	43,552	8.7	1,886,068	12.4
Syria	3,413	598	20,411	4.1	185,180	1.2
Tunisia	3,530	297	10,481	2.1	163,610	1.1
UAE	70	10,795	7,512	1.5	83,600	0.6
W. Sahara	14	3,857	531	0.1	266,000	1.8
Yemen	4,316	557	24,053	4.8	527,968	3.5
Total	**113,763**	441	**501,153**	**100.0**	**15,197,772**	**100.0**

1 UN DESAb

2 UN DESAa

3 UN STATSa

* Occupied Palestinian Territory

** Territory excludes South Sudan, which was established in 2011

	Democracy index 2010 (3)	Democracy index 2010 (3)	GDP real (2010) (4)	% of total	GNI PPP per capita (2010) (5)
Country	overall score	rank	millions (current US$)		current int'l US$
Egypt	3.08	137	218,894	6.8	6,020
Iran	1.94	158	331,015	10.2	11,420
S. Arabia	1.84	160	450,792	13.9	23,100
Turkey	5.73	89	731,144	22.6	15,680
Case countries total			**1,731,845**	53.4	
Algeria	3.44	125	161,980	5.0	8,050
Bahrain	3.49	122	22,946	0.7	21,200
Iraq	4.00	111	81,112	2.5	3,450
Israel	7.48	37	217,443	6.7	25,810
Jordan	3.74	117	26,425	0.8	5,800
Kuwait	3.88	114	124,348	3.8	53,720
Lebanon	5.82	86	37,124	1.1	13,790
Libya	1.94	158	62,360	1.9	16,800
Mauritania	3.86	115	3,614	0.1	2,390
Morocco	3.79	116	90,803	2.8	4,570
Oman	2.86	143	57,849	1.8	25,720
oPt*	5.44	93		0.0	
Qatar	3.09	137	127,332	3.9	76,330
Sudan**	2.42	151	64,792	2.0	2,050
Syria	2.31	152	59,147	1.8	5,080
Tunisia	2.79	144	44,238	1.4	8,940
UAE	2.52	148	297,649	9.2	46,900
W. Sahara				0.0	
Yemen	2.64	146	31,043	0.96	2,470
Total			**3,242,050**	100	
Average	**3.55**	125			

3 The Economist

4 WBd

5 WBa

* Occupied Palestinian Territory

** Territory excludes South Sudan, which was established in 2011

Data for 2009

	HDI (6)	HDI rank (6)	HDI rank within the region	Index of Economic Freedom (7)	Index of Economic Freedom rank (7)
Country	2010			2010	
Egypt	0.620	101	16	59	94
Iran	0.702	70	10	43.4	168
S. Arabia	0.752	55	7	64.1	65
Turkey	0.679	83	13	63.8	67
Algeria	0.677	84	14	56.9	104
Bahrain	0.801	39	4	76.3	12
Iraq	0.573		*18*		
Israel	0.872	15	1	67.7	42
Jordan	0.681	82	12	66.1	51
Kuwait	0.771	47	5	67.7	42
Lebanon	0.739		8	59.5	89
Libya	0.755	53	6	40.2	173
Mauritania	0.433	136	21	52	133
Morocco	0.567	114	19	59.2	91
Oman	0.705		*9*	67.7	42
oPt*	0.641		*15*		
Qatar	0.803	38	3	69.9	31
Sudan**	0.379	154	22		65
Syria	0.589	111	17	49.4	145
Tunisia	0.683	81	11	58.9	95
UAE	0.815	32	2	67.3	67
W. Sahara					
Yemen	0.439	133	20	54.4	121

6 UNDPd

7 Heritage Foundation

* Occupied Palestinian Territory

** Territory excludes South Sudan, which was established in 2011

Data for 2011

Population (thousands)						
Year	*Egypt*	*Iran*	*S.Arabia*	*Turkey*	*Algeria*	*Bahrain*
1950	21514	17414	3121	21238	8753	116
1955	24431	19433	3535	24585	9715	133
1960	27903	21999	4041	28161	10800	162
1965	31771	25064	4787	31838	11923	186
1970	35923	28662	5772	35464	13746	212
1975	40132	32793	7345	39586	16018	265
1980	44952	38577	9801	44105	18811	358
1985	50660	46497	13220	49400	22098	417
1990	56843	54871	16139	54130	25299	493
1995	62064	59757	18492	58865	28292	559
2000	67648	65342	20045	63628	30534	638
2005	74203	69732	24041	68143	32888	725
2010	81121	73974	27448	72752	35468	1262
	Iraq	*Israel*	*Jordan*	*Kuwait*	*Lebanon*	*Libya*
1950	5719	1258	449	152	1443	1029
1955	6562	1719	649	196	1632	1126
1960	7380	2090	895	264	1908	1349
1965	8483	2523	1129	484	2204	1623
1970	10022	2850	1667	753	2464	1994
1975	11784	3337	2001	1054	2765	2466
1980	13744	3746	2299	1377	2795	3063
1985	15477	4083	2803	1742	2885	3850
1990	17374	4500	3416	2088	2948	4334
1995	20288	5332	4382	1628	3463	4775
2000	23857	6015	4827	1941	3742	5231
2005	27359	6605	5342	2264	4052	5770
2010	31672	7418	6187	2737	4228	6355
	Mauritania	*Morocco*	*Oman*	*oPt*	*Qatar*	*Sudan*
1950	657	8953	456	932	25	9190
1955	744	10132	501	988	36	10275
1960	854	11626	557	1069	47	11562
1965	984	13323	631	1191	73	13021
1970	1134	15310	732	1125	108	14766
1975	1312	17305	898	1322	163	17132
1980	1518	19567	1181	1510	222	20071
1985	1748	22291	1539	1760	368	23543
1990	1996	24781	1868	2081	474	26494
1995	2292	26929	2232	2596	501	30141
2000	2643	28793	2264	3199	591	34188
2005	3047	30392	2430	3556	821	38410
2010	3460	31951	2782	4039	1759	43552

	Syria	*Tunisia*	*UAE*	*W.Sahara*	*Yemen*
1950	3413	3530	70	14	4316
1955	3904	3860	79	21	4685
1960	4567	4221	90	33	5116
1965	5378	4630	146	51	5632
1970	6368	5127	232	77	6145
1975	7546	5668	534	75	6691
1980	8907	6457	1016	150	7945
1985	10577	7330	1349	184	9758
1990	12324	8215	1809	221	11948
1995	14171	8936	2349	259	15148
2000	15989	9456	3033	315	17723
2005	18484	9912	4069	440	20649
2010	20411	10481	7512	531	24053

Source: UN DESAa

Annex 2 Historical GDP Values

	GDP total (millions of 1990 Int. GK$)				
	Egypt	Iran	S.Arabia	Turkey	**Case Countries Total**
1950	19,288	28,128	8,610	34,279	**90,305**
1951	19,635	28,128	9,334	38,667	**95,764**
1952	20,001	28,128	9,893	43,295	**101,318**
1953	20,349	28,156	10,875	48,128	**107,507**
1954	20,715	28,156	12,115	46,757	**107,743**
1955	21,101	28,156	12,399	50,528	**112,184**
1956	22,104	30,659	13,312	52,173	**118,247**
1957	23,145	34,939	13,785	56,321	**128,191**
1958	24,245	39,013	14,465	58,892	**136,615**
1959	25,402	42,360	15,955	61,600	**145,317**
1960	26,617	46,467	17,548	63,417	**154,049**
1961	28,372	50,405	19,632	64,480	**162,889**
1962	30,263	51,389	21,974	68,422	**172,047**
1963	32,288	57,043	23,885	74,866	**188,082**
1964	34,448	61,178	25,986	77,951	**199,563**
1965	36,724	68,688	29,137	80,008	**214,557**
1966	36,936	75,579	33,374	89,366	**235,255**
1967	36,473	84,102	36,310	93,377	**250,262**
1968	37,052	96,759	39,547	99,650	**273,008**
1969	39,598	109,304	42,578	104,929	**296,409**
1970	42,105	120,865	46,573	110,071	**319,615**
1971	43,861	135,829	53,289	120,046	**353,025**
1972	44,690	157,909	61,469	127,931	**391,999**
1973	45,924	171,466	73,601	133,858	**424,849**
1974	47,680	186,655	84,700	144,829	**463,863**
1975	52,501	195,684	84,924	157,855	**490,964**
1976	60,622	229,241	92,251	171,601	**553,715**
1977	68,530	226,315	106,191	179,005	**580,041**
1978	73,795	199,481	112,511	184,113	**569,900**
1979	79,620	182,267	120,028	182,536	**564,451**
1980	88,223	156,643	132,160	181,165	**558,190**
1981	91,733	151,918	142,630	189,014	**575,295**
1982	101,531	175,826	144,989	198,495	**620,841**
1983	109,343	199,031	129,404	205,811	**643,589**
1984	116,016	202,379	129,258	217,637	**665,290**
1985	123,674	207,245	120,605	228,744	**680,267**
1986	126,933	187,780	113,260	244,752	**672,725**
1987	130,135	184,939	118,495	266,108	**699,677**
1988	135,593	174,532	122,284	276,460	**708,869**

	Egypt	Iran	S.Arabia	Turkey	**Case Countries Total**
1989	139,663	181,227	126,701	279,614	**727,205**
1990	143,000	199,819	144,438	305,395	**792,652**
1991	138,424	220,999	156,571	308,224	**824,218**
1992	142,992	234,472	160,955	326,670	**865,088**
1993	145,280	239,395	159,989	352,940	**897,604**
1994	151,052	244,901	160,811	333,685	**890,450**
1995	158,065	252,983	161,564	357,681	**930,293**
1996	165,950	267,403	163,815	382,738	**979,906**
1997	175,073	280,773	167,106	411,553	**1,034,506**
1998	185,115	285,827	169,987	424,177	**1,065,106**
1999	196,407	291,258	168,797	404,240	**1,060,702**
2000	207,013	306,112	177,068	433,992	**1,124,185**
2001	214,258	317,438	177,953	401,443	**1,111,092**
2002	221,115	331,723	178,131	433,157	**1,164,126**
2003	228,190	255,607	191,848	458,486	**1,134,131**
2004	237,546	373,743	202,015	499,422	**1,312,726**
2005	248,236	391,309	213,328	541,373	**1,394,246**
2006	265,116	414,005	220,154	578,728	**1,478,003**
2007	283,939	446,297	227,419	605,928	**1,563,583**
2008	304,383	457,455	237,426	611,382	**1,610,646**

	GDP total (millions of 1990 Int. GK$)						
	Algeria	Bahrain	Iraq	Israel	Jordan	Kuwait	Lebanon
1950	12,136	242	7,041	3,623	933	4,181	3,313
1951	12,221	257	7,661	4,707	990	4,532	2,972
1952	12,767	273	8,470	4,910	1,049	4,804	3,157
1953	13,046	290	11,899	4,852	1,112	5,280	3,634
1954	13,811	309	14,145	5,776	1,178	5,882	4,171
1955	14,224	328	13,568	6,558	1,116	6,020	4,506
1956	15,619	349	14,511	7,142	1,532	6,464	4,399
1957	17,391	371	14,370	7,761	1,571	6,693	4,476
1958	18,022	394	16,039	8,319	1,729	7,024	3,840
1959	21,323	419	16,715	9,370	1,858	7,747	4,164
1960	22,780	445	18,658	9,986	1,977	8,420	4,274
1961	20,013	474	20,806	11,077	2,381	8,495	4,555
1962	15,765	504	21,841	12,171	2,446	9,474	4,731
1963	19,928	536	21,447	13,461	2,582	9,984	4,771
1964	20,971	571	24,024	14,780	3,032	10,962	5,059
1965	22,367	607	26,206	16,171	3,379	11,205	5,569
1966	21,287	646	27,593	16,349	3,474	12,584	5,950
1967	23,277	688	26,953	16,758	3,839	12,885	5,668

	Algeria	Bahrain	Iraq	Israel	Jordan	Kuwait	Lebanon
1968	25,996	732	31,740	19,320	3,696	14,089	6,381
1969	28,484	779	32,818	21,755	4,031	14,474	6,520
1970	31,336	832	32,691	23,520	3,600	22,944	6,950
1971	28,666	898	34,712	26,107	3,682	24,537	7,590
1972	34,685	969	33,430	29,342	3,800	25,503	8,514
1973	35,814	1,046	39,042	30,839	3,999	23,847	8,915
1974	37,999	1,136	41,133	32,941	4,355	20,799	10,465
1975	40,705	1,015	47,977	34,038	4,657	18,287	10,724
1976	43,387	1,180	57,735	34,480	5,789	19,466	10,989
1977	47,319	1,322	59,320	34,480	6,166	18,722	11,260
1978	53,387	1,424	70,127	36,144	7,462	20,072	11,539
1979	58,193	1,419	86,258	38,416	8,142	22,827	10,873
1980	59,273	1,525	84,392	41,053	9,689	18,178	10,879
1981	60,766	1,568	69,078	43,173	10,147	14,737	10,366
1982	64,662	1,669	68,501	43,948	10,897	13,006	9,680
1983	68,012	1,785	62,544	45,496	11,115	14,039	9,584
1984	71,774	1,860	62,699	45,905	12,071	14,775	9,786
1985	75,512	1,854	61,714	47,489	12,493	14,148	10,028
1986	74,747	1,897	61,073	49,760	13,626	15,352	9,581
1987	74,225	1,935	62,812	53,344	13,997	14,733	6,705
1988	72,672	2,003	49,540	54,417	13,853	15,247	6,099
1989	75,123	2,053	45,160	54,895	12,387	16,389	6,106
1990	73,934	2,054	44,583	58,511	12,371	13,111	6,099
1991	73,047	2,148	16,540	61,848	12,656	7,735	8,429
1992	74,216	2,316	21,370	66,051	14,807	13,723	8,808
1993	72,583	2,508	21,370	68,298	15,666	18,416	9,425
1994	71,929	2,502	20,306	74,172	16,445	19,970	10,179
1995	74,663	2,600	18,475	79,215	17,495	20,186	10,841
1996	77,500	2,707	20,799	82,938	17,861	19,518	11,274
1997	78,353	2,791	19,996	85,675	18,409	19,708	11,725
1998	82,349	2,924	22,993	88,246	18,950	19,354	12,077
1999	84,984	3,050	24,948	90,805	19,594	19,006	11,980
2000	87,109	3,208	27,692	98,887	20,437	19,899	12,184
2001	89,374	3,356	30,185	98,491	21,520	19,939	12,732
2002	92,949	3,530	32,297	97,900	22,768	20,537	13,152
2003	99,362	3,785	25,256	100,152	23,724	23,925	13,692
2004	104,529	3,997	25,256	105,360	25,765	26,438	14,705
2005	109,860	4,313	25,079	110,733	27,852	29,240	15,073
2006	112,057	4,602	26,634	116,602	30,080	30,732	15,163
2007	115,419	4,974	27,034	122,666	32,757	31,500	16,300
2008	118,882	5,278	29,602	127,572	35,346	33,484	17,686

	GDP total (millions of 1990 Int. GK$)						
	Libya	Mauritania	Morocco	Oman	oPt*	Qatar	Sudan
1950	824	467	13,598	304	965	763	6,609
1951	915	484	14,046	324	1,009	827	6,926
1952	982	502	14,509	344	1,055	876	7,270
1953	998	520	14,987	366	1,104	963	7,613
1954	994	539	15,481	389	1,157	1,073	7,983
1955	1,251	559	15,991	413	1,206	1,099	8,373
1956	1,525	580	16,093	439	1,260	1,180	9,259
1957	1,592	601	16,195	467	1,321	1,223	9,133
1958	1,755	623	16,299	496	1,380	1,282	9,510
1959	1,897	647	16,402	528	1,462	1,415	10,640
1960	2,448	698	16,507	560	1,534	1,496	10,838
1961	2,688	817	17,085	567	1,588	1,497	10,838
1962	3,566	799	17,684	681	1,683	1,555	11,592
1963	4,814	750	18,303	711	1,783	1,657	11,261
1964	6,812	974	18,944	712	1,891	1,712	11,142
1965	8,733	1,109	19,608	715	2,010	1,837	11,896
1966	10,345	1,115	20,700	752	2,130	2,493	11,717
1967	11,515	1,154	21,853	1,250	2,045	3,014	11,354
1968	15,395	1,256	23,071	2,274	1,859	3,474	12,048
1969	17,389	1,237	24,356	2,858	1,931	3,706	12,781
1970	18,222	1,365	25,713	2,957	2,044	3,756	12,246
1971	17,142	1,378	27,154	2,983	2,169	4,665	13,092
1972	15,241	1,396	27,807	3,262	2,306	5,263	12,814
1973	15,410	1,309	28,800	2,809	2,455	6,228	11,783
1974	13,186	1,443	30,351	3,132	2,632	5,661	12,966
1975	14,172	1,351	32,385	3,897	2,797	5,823	14,612
1976	17,438	1,459	35,950	4,397	2,958	6,263	17,302
1977	18,904	1,440	37,711	4,410	3,137	5,586	19,932
1978	19,553	1,434	38,808	4,326	3,332	6,114	19,621
1979	22,155	1,500	40,584	4,511	3,531	6,364	17,586
1980	22,290	1,560	44,278	4,784	3,732	6,816	17,758
1981	18,098	1,619	43,054	5,599	3,940	5,834	18,128
1982	17,502	1,586	47,203	6,245	4,176	4,731	20,421
1983	17,311	1,663	46,930	7,288	4,465	4,246	20,844
1984	15,939	1,543	48,894	8,507	4,769	4,143	19,800
1985	14,529	1,587	51,955	9,697	5,094	3,699	18,557
1986	13,265	1,676	56,023	9,906	5,446	3,130	19,291
1987	12,842	1,727	54,762	10,699	5,834	3,192	19,720
1988	12,927	1,792	60,367	11,018	6,265	3,240	19,952
1989	13,014	1,852	61,748	11,481	6,706	3,275	21,518
1990	12,780	1,825	64,082	11,487	7,222	3,276	19,793
1991	12,013	1,872	68,504	12,176	7,853	3,263	21,179

	Libya	Mauritania	Morocco	Oman	oPt*	Qatar	Sudan
1992	11,508	1,904	65,764	13,211	8,555	3,566	22,280
1993	10,979	2,009	65,106	14,017	9,308	3,552	22,904
1994	10,836	2,101	71,877	14,556	10,189	3,635	23,362
1995	10,804	2,198	67,133	15,259	11,234	3,742	24,063
1996	11,160	2,319	75,323	15,700	12,381	3,922	25,242
1997	11,741	2,393	73,566	16,671	13,573	4,865	27,766
1998	11,318	2,482	79,339	17,121	14,807	5,275	29,432
1999	11,442	2,583	79,259	17,087	16,153	5,565	31,699
2000	11,832	2,713	80,052	18,027	16,153	6,172	34,773
2001	12,530	2,832	85,095	19,379	12,922	6,561	36,894
2002	12,705	2,948	87,818	19,882	10,338	6,770	39,108
2003	13,455	3,113	93,175	20,280	9,000	7,197	41,884
2004	14,127	3,275	98,820	21,375	9,000	8,471	44,021
2005	15,582	3,452	101,785	22,422	9,000	9,250	46,794
2006	16,626	3,845	109,724	23,768	9,000	10,638	52,082
2007	17,873	3,884	112,269	25,598	9,000	12,265	57,394
2008	18,481	3,969	118,997	27,594	9,000	14,278	61,297

	GDP total (millions of 1990 Int. GK$)						
	Syria	Tunisia	UAE	Western Sahara	Yemen	**Subtotal non-case countries**	**Total**
1950	8,418	3,920	1,130		4,353	**76,720**	**167,024**
1951	8,098	3,963	1,225		4,468	**79,525**	**175,289**
1952	10,202	4,450	1,298		4,584	**85,406**	**186,724**
1953	11,566	4,618	1,427		4,708	**92,889**	**200,397**
1954	13,266	4,720	1,590		4,831	**101,203**	**208,946**
1955	11,970	4,477	1,628		4,959	**102,156**	**214,340**
1956	14,175	4,775	1,749		5,091	**110,054**	**228,302**
1957	15,051	4,579	1,812		5,228	**113,750**	**241,941**
1958	12,972	5,175	1,902		5,367	**116,043**	**252,658**
1959	13,460	4,959	2,097		5,510	**124,532**	**269,849**
1960	13,704	5,571	2,312		5,660	**131,788**	**285,837**
1961	14,832	6,053	2,526		5,810	**136,024**	**298,913**
1962	18,351	5,912	2,809		5,970	**141,455**	**313,502**
1963	18,342	6,806	3,097		6,148	**150,307**	**338,389**
1964	18,755	7,100	3,414		6,307	**161,090**	**360,653**
1965	18,704	7,547	3,762		6,486	**171,841**	**386,399**
1966	17,265	7,735	4,147		6,674	**176,888**	**412,142**
1967	18,696	7,684	4,570		6,868	**184,006**	**434,268**
1968	19,394	8,491	5,037		7,052	**205,242**	**478,250**
1969	23,031	8,793	5,554		7,260	**221,694**	**518,103**
1970	22,155	9,315	6,123		8,731	**238,439**	**558,054**

	Syria	Tunisia	UAE	Western Sahara	Yemen	**Subtotal non-case countries**	**Total**
1971	24,352	10,302	7,147		10,253	**250,770**	**603,794**
1972	30,447	12,129	8,343		11,070	**270,266**	**662,265**
1973	27,846	12,051	9,739		12,431	**278,308**	**703,158**
1974	34,563	13,019	12,894		13,152	**295,775**	**759,639**
1975	41,306	13,952	13,307		14,152	**319,106**	**810,070**
1976	45,834	15,054	15,308		16,363	**355,305**	**909,019**
1977	45,254	15,567	17,978		18,167	**370,629**	**950,669**
1978	49,202	16,571	17,557		19,711	**400,339**	**970,239**
1979	50,986	17,657	21,926		20,805	**437,690**	**1,002,141**
1980	57,097	18,966	27,717		20,918	**454,867**	**1,013,057**
1981	62,527	20,013	28,492		22,191	**443,292**	**1,018,586**
1982	63,857	19,915	26,145		22,563	**450,670**	**1,071,512**
1983	64,766	20,848	24,833		23,856	**453,590**	**1,097,179**
1984	62,131	22,040	25,893		24,778	**461,275**	**1,126,566**
1985	65,928	23,279	25,287		24,578	**471,396**	**1,151,663**
1986	62,670	22,918	19,919		25,115	**469,366**	**1,142,092**
1987	63,865	24,451	20,631		26,135	**475,584**	**1,175,261**
1988	72,342	24,478	20,580		27,249	**478,018**	**1,186,887**
1989	65,860	25,384	22,766		28,203	**477,898**	**1,205,103**
1990	70,894	27,387	25,496		28,212	**487,097**	**1,279,749**
1991	75,927	28,455	25,547		28,297	**471,472**	**1,295,690**
1992	81,318	30,675	26,237		29,683	**499,976**	**1,365,064**
1993	89,938	31,349	26,001		30,544	**517,958**	**1,415,562**
1994	96,821	32,352	28,228		31,205	**544,653**	**1,435,103**
1995	102,698	33,129	30,459		34,594	**562,778**	**1,493,071**
1996	109,904	35,481	32,356		36,631	**597,008**	**1,576,914**
1997	112,640	37,397	34,517		39,592	**615,372**	**1,649,878**
1998	121,201	39,192	35,916		41,532	**648,504**	**1,713,610**
1999	117,444	41,582	37,029		43,110	**661,318**	**1,722,020**
2000	120,145	43,537	41,621		45,783	**694,224**	**1,818,409**
2001	124,590	45,670	42,329		47,523	**715,924**	**1,827,016**
2002	131,941	46,447	43,429		49,376	**737,899**	**1,902,025**
2003	133,393	49,048	48,597		51,203	**764,247**	**1,898,378**
2004	137,128	51,991	53,311		53,251	**804,828**	**2,117,554**
2005	143,299	54,123	57,683		56,233	**845,783**	**2,240,029**
2006	150,607	56,991	63,105		58,033	**894,301**	**2,372,304**
2007	156,932	60,582	67,080		59,948	**937,489**	**2,501,072**
2008	165,093	63,368	72,044		62,106	**988,093**	**2,598,739**

Source: Maddison

Annex 3 GDP per capita

Population (millions)					
	Egypt	Iran	S.Arabia	Turkey	Total
1950	21,198	16,357	3,860	21,122	112,804
1951	21,704	16,807	3,932	21,669	115,782
1952	22,223	17,267	4,006	22,236	118,794
1953	22,755	17,735	4,082	22,831	121,802
1954	23,299	18,216	4,160	23,464	124,746
1955	23,856	18,716	4,243	24,145	127,981
1956	24,426	19,233	4,329	24,877	131,350
1957	25,010	19,773	4,420	25,671	134,875
1958	25,608	20,340	4,514	26,506	138,542
1959	26,220	20,932	4,614	27,356	142,298
1960	26,847	21,548	4,718	28,217	146,156
1961	27,523	22,181	4,828	29,030	150,060
1962	28,173	22,837	4,943	29,789	153,652
1963	28,821	23,512	5,065	30,509	157,685
1964	29,533	24,218	5,192	31,227	161,930
1965	30,265	24,949	5,327	31,951	166,256
1966	30,986	25,708	5,469	32,678	170,620
1967	31,681	26,477	5,618	33,411	175,195
1968	32,338	27,254	5,775	34,165	179,767
1969	32,966	28,046	5,939	34,952	184,373
1970	33,574	28,854	6,109	35,758	189,077
1971	34,184	29,678	6,287	36,580	194,061
1972	34,807	30,522	6,473	37,493	199,232
1973	35,480	31,392	6,667	38,503	204,779
1974	36,216	32,306	6,868	39,513	210,457
1975	36,952	33,265	7,205	40,530	216,364
1976	37,737	34,259	7,620	41,472	222,415
1977	38,784	35,350	8,129	42,377	228,902
1978	40,020	36,510	8,709	43,275	235,894
1979	41,258	37,839	9,346	44,165	243,309
1980	42,634	39,422	9,999	45,048	251,246
1981	44,196	41,141	10,627	46,253	259,749
1982	45,682	42,885	11,255	47,464	268,274
1983	47,093	44,632	11,912	48,661	277,748
1984	48,550	46,409	12,607	49,840	286,943
1985	50,052	48,209	13,330	50,997	296,120
1986	51,593	50,027	13,998	52,127	305,147
1987	52,794	51,607	14,620	53,243	313,196
1988	54,015	52,997	15,233	54,356	321,229
1989	55,252	54,479	15,829	55,462	329,527

1990	56,683	56,669	16,061	56,561	338,841
1991	58,129	58,787	16,306	57,650	346,015
1992	59,394	59,999	16,946	58,731	355,079
1993	60,672	60,151	18,058	59,801	363,066
1994	61,980	60,181	19,110	60,867	370,910
1995	63,321	60,781	19,968	61,940	379,152
1996	64,707	61,343	20,626	63,018	387,009
1997	66,139	61,909	21,228	64,098	395,015
1998	67,611	62,413	21,840	65,177	403,229
1999	69,080	62,834	22,479	66,254	411,352
2000	70,512	63,273	23,147	67,329	419,560
2001	71,929	63,750	23,825	68,405	427,841
2002	73,347	63,942	24,492	69,479	435,832
2003	74,761	63,988	25,146	70,549	443,539
2004	76,166	64,326	25,784	71,614	451,371
2005	77,562	64,737	26,404	72,674	459,440
2006	78,950	65,025	27,006	73,726	467,502
2007	80,335	65,398	27,587	74,768	475,654
2008	81,714	65,875	28,147	75,794	483,943

Source: Maddison

GDP (millions US$ 1990)					
	Egypt	Iran	S.Arabia	Turkey	Total
1950	19,288	28,128	8,610	34,279	163,124
1951	19,635	28,128	9,334	38,667	171,387
1952	20,001	28,128	9,893	43,295	182,820
1953	20,349	28,156	10,875	48,128	196,491
1954	20,715	28,156	12,115	46,757	205,038
1955	21,101	28,156	12,399	50,528	210,430
1956	22,104	30,659	13,312	52,173	224,390
1957	23,145	34,939	13,785	56,321	238,027
1958	24,245	39,013	14,465	58,892	248,742
1959	25,402	42,360	15,955	61,600	265,931
1960	26,617	46,467	17,548	63,417	281,917
1961	28,372	50,405	19,632	64,480	294,991
1962	30,263	51,389	21,974	68,422	309,578
1963	32,288	57,043	23,885	74,866	334,463
1964	34,448	61,178	25,986	77,951	356,725
1965	36,724	68,688	29,137	80,008	382,469
1966	36,936	75,579	33,374	89,366	408,210
1967	36,473	84,102	36,310	93,377	430,334
1968	37,052	96,759	39,547	99,650	474,314
1969	39,598	109,304	42,578	104,929	514,165

1970	42,105	120,865	46,573	110,071	554,114
1971	43,861	135,829	53,289	120,046	599,852
1972	44,690	157,909	61,469	127,931	658,321
1973	45,924	171,466	73,601	133,858	699,212
1974	47,680	186,655	84,700	144,829	755,691
1975	52,501	195,684	84,924	157,855	806,120
1976	60,622	229,241	92,251	171,601	905,067
1977	68,530	226,315	106,191	179,005	946,715
1978	73,795	199,481	112,511	184,113	966,283
1979	79,620	182,267	120,028	182,536	998,183
1980	88,223	156,643	132,160	181,165	1,009,097
1981	91,733	151,918	142,630	189,014	1,014,624
1982	101,531	175,826	144,989	198,495	1,067,548
1983	109,343	199,031	129,404	205,811	1,093,213
1984	116,016	202,379	129,258	217,637	1,122,598
1985	123,674	207,245	120,605	228,744	1,147,693
1986	126,933	187,780	113,260	244,752	1,138,120
1987	130,135	184,939	118,495	266,108	1,171,287
1988	135,593	174,532	122,284	276,460	1,182,911
1989	139,663	181,227	126,701	279,614	1,201,125
1990	143,000	199,819	144,438	305,395	1,275,769
1991	138,424	220,999	156,571	308,224	1,291,708
1992	142,992	234,472	160,955	326,670	1,361,080
1993	145,280	239,395	159,989	352,940	1,411,576
1994	151,052	244,901	160,811	333,685	1,431,115
1995	158,065	252,983	161,564	357,681	1,489,081
1996	165,950	267,403	163,815	382,738	1,572,922
1997	175,073	280,773	167,106	411,553	1,645,884
1998	185,115	285,827	169,987	424,177	1,709,614
1999	196,407	291,258	168,797	404,240	1,718,022
2000	207,013	306,112	177,068	433,992	1,814,409
2001	214,258	317,438	177,953	401,443	1,823,014
2002	221,115	331,723	178,131	433,157	1,898,021
2003	228,190	255,607	191,848	458,486	1,894,372
2004	237,546	373,743	202,015	499,422	2,113,546
2005	248,236	391,309	213,328	541,373	2,236,019
2006	265,116	414,005	220,154	578,728	2,368,292
2007	283,939	446,297	227,419	605,928	2,497,058
2008	304,383	457,455	237,426	611,382	2,594,723

GDP per capita (1990 Int. GK$)					
= population/GDP (see tables above)					
	Egypt	Iran	S. Arabia	Turkey	Region
1950	910	1,720	2,231	1,623	1,446
1951	905	1,674	2,374	1,784	1,480
1952	900	1,629	2,470	1,947	1,539
1953	894	1,588	2,664	2,108	1,613
1954	889	1,546	2,912	1,993	1,644
1955	885	1,504	2,922	2,093	1,644
1956	905	1,594	3,075	2,097	1,708
1957	925	1,767	3,119	2,194	1,765
1958	947	1,918	3,204	2,222	1,795
1959	969	2,024	3,458	2,252	1,869
1960	991	2,156	3,719	2,247	1,929
1961	1,031	2,272	4,066	2,221	1,966
1962	1,074	2,250	4,445	2,297	2,015
1963	1,120	2,426	4,715	2,454	2,121
1964	1,166	2,526	5,005	2,496	2,203
1965	1,213	2,753	5,469	2,504	2,300
1966	1,192	2,940	6,102	2,735	2,393
1967	1,151	3,176	6,463	2,795	2,456
1968	1,146	3,550	6,848	2,917	2,638
1969	1,201	3,897	7,170	3,002	2,789
1970	1,254	4,189	7,624	3,078	2,931
1971	1,283	4,577	8,475	3,282	3,091
1972	1,284	5,174	9,497	3,412	3,304
1973	1,294	5,462	11,040	3,477	3,414
1974	1,317	5,778	12,333	3,665	3,591
1975	1,421	5,883	11,787	3,895	3,726
1976	1,606	6,691	12,106	4,138	4,069
1977	1,767	6,402	13,064	4,224	4,136
1978	1,844	5,464	12,919	4,255	4,096
1979	1,930	4,817	12,843	4,133	4,103
1980	2,069	3,974	13,217	4,022	4,016
1981	2,076	3,693	13,421	4,087	3,906
1982	2,223	4,100	12,883	4,182	3,979
1983	2,322	4,459	10,863	4,230	3,936
1984	2,390	4,361	10,253	4,367	3,912
1985	2,471	4,299	9,048	4,485	3,876
1986	2,460	3,754	8,091	4,695	3,730
1987	2,465	3,584	8,105	4,998	3,740
1988	2,510	3,293	8,027	5,086	3,682

1989	2,528	3,327	8,004	5,041	3,645
1990	2,523	3,526	8,993	5,399	3,765
1991	2,381	3,759	9,602	5,346	3,733
1992	2,408	3,908	9,498	5,562	3,833
1993	2,395	3,980	8,860	5,902	3,888
1994	2,437	4,069	8,415	5,482	3,858
1995	2,496	4,162	8,091	5,775	3,927
1996	2,565	4,359	7,942	6,073	4,064
1997	2,647	4,535	7,872	6,421	4,167
1998	2,738	4,580	7,783	6,508	4,240
1999	2,843	4,635	7,509	6,101	4,177
2000	2,936	4,838	7,650	6,446	4,325
2001	2,979	4,979	7,469	5,869	4,261
2002	3,015	5,188	7,273	6,234	4,355
2003	3,052	3,995	7,629	6,499	4,271
2004	3,119	5,810	7,835	6,974	4,683
2005	3,200	6,045	8,079	7,449	4,867
2006	3,358	6,367	8,152	7,850	5,066
2007	3,534	6,824	8,244	8,104	5,250
2008	3,725	6,944	8,435	8,066	5,362

Annex 4 Life Expectancy and Adult Literacy

	Life expectancy at birth, total (years)					
	Egypt	Iran	S. Arabia	Turkey	Algeria	Bahrain
1960	45.9	44.6	44.9	48.3	47.0	51.8
1961	46.3	45.3	45.5	48.4	47.5	53.2
1962	46.8	46.1	46.1	48.4	48.1	54.6
1963	47.2	46.8	46.8	48.5	48.6	56.0
1964	47.6	47.5	47.5	48.6	49.2	57.4
1965	48.1	48.2	48.2	48.7	49.8	58.6
1966	48.6	48.9	48.9	48.8	50.5	59.8
1967	49.0	49.5	49.8	49.0	51.1	61.0
1968	49.5	50.1	50.6	49.2	51.7	62.0
1969	50.0	50.6	51.5	49.6	52.3	63.0
1970	50.5	51.2	52.4	50.0	52.9	63.9
1971	51.0	51.9	53.4	50.5	53.5	64.7
1972	51.5	52.7	54.4	51.0	54.2	65.4
1973	52.0	53.6	55.4	51.6	54.8	66.1
1974	52.6	54.5	56.4	52.3	55.5	66.8
1975	53.2	55.2	57.5	52.9	56.2	67.4
1976	53.8	55.6	58.5	53.6	56.9	68.0
1977	54.4	55.4	59.5	54.3	57.6	68.5
1978	55.0	54.7	60.5	55.1	58.2	69.0
1979	55.6	53.6	61.4	55.8	58.9	69.5
1980	56.2	52.3	62.3	56.6	59.6	69.9
1981	56.7	51.2	63.1	57.3	60.3	70.3
1982	57.3	50.3	63.9	58.0	61.1	70.6
1983	57.9	50.1	64.7	58.8	62.0	70.9
1984	58.4	50.5	65.4	59.5	62.8	71.2
1985	59.0	51.6	66.0	60.1	63.7	71.5
1986	59.6	53.3	66.7	60.8	64.6	71.7
1987	60.2	55.4	67.2	61.4	65.4	72.0
1988	60.8	57.6	67.8	61.9	66.0	72.1
1989	61.4	59.8	68.3	62.5	66.6	72.3
1990	62.0	61.9	68.8	63.1	67.1	72.5
1991	62.7	63.7	69.2	63.6	67.4	72.6
1992	63.4	65.3	69.6	64.2	67.7	72.7
1993	64.1	66.5	69.9	64.8	68.0	72.9
1994	64.8	67.5	70.2	65.4	68.2	73.0
1995	65.6	68.2	70.5	66.1	68.5	73.1
1996	66.3	68.6	70.7	66.7	68.7	73.3
1997	67.1	68.9	70.9	67.4	69.0	73.4
1998	67.8	69.2	71.1	68.1	69.3	73.5
1999	68.4	69.5	71.3	68.8	69.7	73.7

	Egypt	Iran	S. Arabia	Turkey	Algeria	Bahrain
2000	69.1	69.7	71.5	69.4	70.0	73.8
2001	69.7	70.1	71.7	70.1	70.4	73.9
2002	70.2	70.4	71.9	70.6	70.7	74.0
2003	70.7	70.7	72.2	71.2	71.1	74.2
2004	71.1	71.0	72.4	71.6	71.4	74.3
2005	71.5	71.3	72.7	72.1	71.6	74.4
2006	71.9	71.6	72.9	72.5	71.9	74.5
2007	72.2	71.9	73.2	72.8	72.2	74.6
2008	72.5	72.2	73.4	73.1	72.4	74.8
2009	72.7	72.5	73.6	73.4	72.6	74.9
2010	73.0	72.8	73.9	73.7	72.9	75.0

	Life expectancy at birth, total (years)					
	Iraq	Israel	Jordan	Kuwait	Lebanon	Libya
1960	48.9		53.9	61.4	61.0	46.7
1961	49.9	72.0	54.6	62.1	61.5	47.2
1962	51.0	72.1	55.3	62.7	62.0	47.7
1963	52.0		56.0	63.3	62.4	48.2
1964	52.9		56.7	63.9	62.8	48.6
1965	53.9		57.4	64.4	63.1	49.1
1966	54.7	72.3	58.1	64.9	63.5	49.6
1967	55.6	71.5	58.8	65.5	63.8	50.1
1968	56.3	71.1	59.5	65.9	64.1	50.5
1969	57.0	71.0	60.2	66.4	64.5	51.0
1970	57.7	71.2	60.9	66.8	64.8	51.5
1971	58.4	71.7	61.6	67.3	65.1	52.0
1972	59.1	71.1	62.3	67.7	65.3	52.7
1973	59.7	71.7	63.0	68.0	65.5	53.4
1974	60.3	71.7	63.7	68.4	65.7	54.2
1975	60.7	72.0	64.3	68.8	65.8	55.1
1976	60.8	73.0	64.9	69.1	66.0	56.0
1977	60.4	73.0	65.5	69.5	66.1	57.0
1978	59.6	73.2	66.0	69.8	66.3	58.0
1979	58.5	73.5	66.6	70.1	66.4	59.0
1980	57.3	73.9	67.0	70.5	66.6	60.0
1981	56.3	74.3	67.5	70.8	66.7	61.0
1982	55.8	74.1	67.9	71.0	66.9	61.9
1983	56.0	74.5	68.3	71.3	67.1	62.9
1984	56.7	74.8	68.7	71.5	67.3	63.8
1985	58.1	75.2	69.0	71.8	67.5	64.7
1986	60.0	75.0	69.3	72.0	67.7	65.5

	Iraq	Israel	Jordan	Kuwait	Lebanon	Libya
1987	62.0	75.3	69.6	72.2	67.9	66.2
1988	64.1	74.4	69.9	72.4	68.2	66.9
1989	65.9	76.3	70.2	72.5	68.4	67.5
1990	67.5	76.6	70.4	72.7	68.7	68.1
1991	68.8	76.8	70.7	72.8	68.9	68.6
1992	69.8	76.5	70.9	73.0	69.2	69.1
1993	70.5	77.2	71.1	73.1	69.4	69.6
1994	71.0	77.4	71.3	73.2	69.6	70.1
1995	71.2	77.5	71.4	73.3	69.8	70.7
1996	71.3	78.1	71.6	73.4	70.0	71.1
1997	71.3	78.0	71.7	73.5	70.2	71.6
1998	71.1	78.1	71.8	73.6	70.3	71.9
1999	71.0	78.7	72.0	73.7	70.5	72.3
2000	70.7	79.0	72.1	73.8	70.6	72.5
2001	70.4	79.4	72.2	73.8	70.8	72.8
2002	70.0	79.5	72.3	73.9	71.0	73.0
2003	69.5	79.6	72.4	74.0	71.1	73.2
2004	69.0	80.1	72.5	74.0	71.3	73.4
2005	68.5	80.2	72.6	74.1	71.5	73.6
2006	68.1	80.3	72.8	74.2	71.7	73.9
2007	67.9	80.6	72.9	74.3	71.9	74.1
2008	67.9	81.0	73.0	74.4	72.0	74.3
2009	68.1	81.6	73.2	74.5	72.2	74.5
2010	68.5	81.5	73.3	74.6	72.4	74.8

	Life expectancy at birth, total (years)					
	Mauritania	Morocco	Oman	oPt*	Qatar	Sudan
1960	42.2	46.6	42.3		59.8	41.6
1961	42.6	47.1	42.9		60.4	41.9
1962	43.0	47.6	43.6		61.1	42.1
1963	43.3	48.1	44.3		61.7	42.5
1964	43.7	48.6	45.1		62.4	42.8
1965	44.0	49.1	45.9		63.0	43.2
1966	44.5	49.5	46.7		63.6	43.6
1967	45.0	50.0	47.6		64.3	44.0
1968	45.5	50.5	48.5		64.9	44.4
1969	46.2	51.0	49.5		65.5	44.8
1970	46.9	51.5	50.5		66.1	45.2
1971	47.6	52.0	51.5		66.8	45.6
1972	48.3	52.5	52.5		67.4	46.0
1973	49.0	53.0	53.6		68.0	46.4

	Mauritania	Morocco	Oman	oPt*	Qatar	Sudan
1974	49.6	53.5	54.6		68.5	46.8
1975	50.3	54.1	55.6		69.1	47.2
1976	50.8	54.7	56.6		69.6	47.6
1977	51.4	55.4	57.7		70.0	48.1
1978	51.9	56.1	58.7		70.5	48.5
1979	52.5	56.8	59.7		70.9	48.9
1980	53.0	57.6	60.8		71.2	49.3
1981	53.5	58.4	61.8		71.6	49.7
1982	53.9	59.2	62.9		71.9	50.0
1983	54.3	60.0	64.0		72.2	50.4
1984	54.6	60.6	65.0		72.5	50.7
1985	54.9	61.3	66.0		72.8	50.9
1986	55.1	61.9	67.1		73.1	51.2
1987	55.3	62.5	68.0		73.4	51.5
1988	55.5	63.0	69.0		73.6	51.9
1989	55.7	63.6	69.8		73.9	52.2
1990	55.9	64.1	70.6	68.0	74.1	52.5
1991	56.1	64.7	71.3	68.4	74.4	52.9
1992	56.3	65.2	71.9	68.7	74.6	53.2
1993	56.4	65.7	72.4	69.0	74.8	53.6
1994	56.6	66.2	72.7	69.4	75.1	53.9
1995	56.7	66.6	73.0	69.7	75.3	54.3
1996	56.7	67.0	73.3	70.0	75.5	54.7
1997	56.8	67.5	73.5	70.2	75.7	55.2
1998	56.9	67.9	73.7	70.5	75.9	55.7
1999	56.9	68.3	73.9	70.7	76.1	56.3
2000	57.0	68.7	74.1	70.9	76.3	57.0
2001	57.1	69.1	74.2	71.1	76.5	57.6
2002	57.1	69.4	74.2	71.3	76.7	58.2
2003	57.1	69.8	74.1	71.4	76.9	58.7
2004	57.2	70.1	73.9	71.6	77.1	59.2
2005	57.2	70.4	73.6	71.7	77.2	59.5
2006	57.3	70.7	73.3	71.9	77.4	59.9
2007	57.5	71.0	73.1	72.1	77.6	60.2
2008	57.7	71.3	73.0	72.3	77.8	60.5
2009	57.9	71.6	73.0	72.5	77.9	60.8
2010	58.2	71.9	73.1	72.6	78.1	61.1

	Life expectancy at birth, total (years)					
	Syria	Tunisia	UAE	W. Sahara	Yemen	Region
1960	52.7	48.3	51.6		37.8	46.5
1961	53.4	48.8	52.7		38.1	47.3
1962	54.1	49.3	53.8		38.3	47.8
1963	54.8	49.8	54.9		38.6	47.9
1964	55.5	50.3	56.1		38.9	48.3
1965	56.3	50.8	57.2		39.1	48.8
1966	57.0	51.3	58.4		39.3	49.7
1967	57.7	51.8	59.5		39.6	50.1
1968	58.5	52.4	60.6		39.8	50.6
1969	59.3	53.0	61.6		40.0	51.1
1970	60.0	53.7	62.5		40.3	51.7
1971	60.7	54.4	63.4		40.6	52.3
1972	61.5	55.2	64.2		41.1	52.9
1973	62.1	56.0	64.9		41.7	53.5
1974	62.8	56.8	65.6		42.5	54.2
1975	63.4	57.7	66.2		43.4	54.8
1976	64.0	58.6	66.8		44.4	55.4
1977	64.6	59.4	67.3		45.5	55.9
1978	65.1	60.4	67.8		46.6	56.3
1979	65.7	61.3	68.2		47.7	56.6
1980	66.2	62.1	68.7		48.8	56.9
1981	66.7	62.9	69.1		49.9	57.2
1982	67.3	63.7	69.5		50.9	57.5
1983	67.8	64.4	69.9		51.8	58.0
1984	68.3	65.1	70.2		52.7	58.6
1985	68.8	65.7	70.6		53.5	59.3
1986	69.3	66.3	70.9		54.2	60.2
1987	69.7	66.9	71.3		54.8	61.0
1988	70.2	67.5	71.6		55.3	61.9
1989	70.6	68.1	71.9		55.7	62.8
1990	71.1	70.3	72.1		56.1	63.7
1991	71.5	70.5	72.4		56.4	64.5
1992	71.8	70.8	72.7		56.6	65.1
1993	72.2	70.8	72.9		56.8	65.7
1994	72.5	71.0	73.2		57.1	66.2
1995	72.8	71.4	73.4		57.4	66.8
1996	73.1	71.6	73.7		57.7	67.2
1997	73.4	71.9	73.9		58.1	67.6
1998	73.6	72.1	74.2		58.6	68.0
1999	73.8	72.5	74.4		59.1	68.4

	Syria	Tunisia	UAE	W. Sahara	Yemen	Region
2000	74.0	72.6	74.6		59.7	68.8
2001	74.2	72.8	74.8		60.3	69.2
2002	74.4	73.0	75.1		60.9	69.6
2003	74.6	73.1	75.3		61.5	69.9
2004	74.8	73.3	75.5		62.1	70.2
2005	74.9	73.5	75.7		62.6	70.5
2006	75.1	73.9	75.9		63.2	70.8
2007	75.3	74.2	76.0		63.7	71.0
2008	75.4	74.3	76.2		64.1	71.3
2009	75.6	74.5	76.4		64.6	71.6
2010	75.7	74.6	76.6		65.0	71.8

Source: WBe

	Adult Literacy (15+; %)							
	Egypt	Iran	S. Arabia	Turkey	Jordan	Kuwait	Libya	Morocco
1975				61.6		59.6		
1976	38.2	36.5						
1979					66.8			
1980				65.7		67.5		
1982								30.3
1984							60.2	
1985				76		74.5		
1986	44.4	52.3						
1990				79.2				
1991		65.5						
1992			70.8					
1994							77.2	41.6
1995						78.4		
1996	55.6	73.1						
2000			79.4					
2002		77						
2003					89.9			
2004			82.9	87.4			86.1	52.3
2005	71.4	82.4		88.2	91.1	93.3		
2006	66.4	82.3		88.1		93.3		
2007				88.7	92.2	93.7		
2008		85				93.9		55.1
2009				90.8				56.1
2010	72		86.6		92.6		89.2	

Source: UIS

Annex 5 GDP and HDI Comparison

	GDP per capita PPP 2011	HDI 2011		GDP per capita PPP 2011	HDI 2011
Congo DR	303	0.299	Benin	1,411	0.434
Liberia	422	0.381	Kenya	1,440	0.515
Eritrea	490	0.346	Côte d'Ivoire	1,657	0.426
Burundi	515	0.352	Sao Tome	1,668	0.522
Cuba	630	0.777	Gambia	1,711	0.440
Niger	652	0.297	Senegal	1,725	0.471
CAR*	700	0.348	Tajikistan	1,801	0.618
Sierra Leone	716	0.348	Cambodia	1,898	0.538
Malawi	729	0.415	Nigeria	1,946	0.467
Mozambique	759	0.322	Sudan	1,960	0.419
Ethiopia	814	0.392	Djibouti	2,026	0.442
Togo	875	0.455	Kyrgyzstan	2,027	0.621
Afghanistan	879	0.371	Papua N. Guinea	2,038	0.462
Mali	930	0.347	Laos	2,041	0.538
Madagascar	950	0.483	Cameroon	2,043	0.492
Rwanda	990	0.429	Mauritania	2,227	0.464
Comoros	998	0.428	Yemen	2,255	0.459
Guinea	1,005	0.352	Kiribati	2,258	0.627
Nepal	1,021	0.460	Pakistan	2,317	0.513
Guinea-Bissau	1,041	0.364	Solomon Islands	2,425	0.526
Haiti	1,047	0.453	Uzbekistan	2,456	0.649
Uganda	1,079	0.454	Nicaragua	2,494	0.597
Burkina Faso	1,086	0.340	Viet Nam	2,611	0.614
Timor-Leste	1,113	0.571	India	2,635	0.551
Tanzania	1,208	0.470	Moldova	2,768	0.657
Chad	1,262	0.336	Guyana	2,889	0.632
Zambia	1,278	0.443	Micronesia	2,896	0.640
Lesotho	1,349	0.456	Iraq	3,227	0.583
Bangladesh	1,356	0.511	Cape Verde	3,240	0.584
Ghana	1,380	0.553	Philippines	3,382	0.651

* Central African Republic

	GDP per capita PPP 2011	HDI 2011		GDP per capita PPP 2011	HDI 2011
Congo	3,434	0.53100	Jamaica	7,272	0.72900
Mongolia	3,562	0.66800	Algeria	7,367	0.71100
Indonesia	3,570	0.62400	Thailand	7,378	0.68600
Honduras	3,641	0.63000	Maldives	7,531	0.68700
Vanuatu	3,935	0.62500	BiH*	7,598	0.73400
Samoa	3,972	0.70100	Dominican R.	7,728	0.70000
Morocco	3,973	0.58900	Peru	7,967	0.73800
Tonga	4,133	0.70900	Azerbaijan	8,024	0.73200
Bolivia	4,172	0.67100	Tunisia	8,183	0.71000
Sri Lanka	4,203	0.71100	Colombia	8,250	0.71700
Fiji	4,300	0.70000	Macedonia	9,147	0.73800
Bhutan	4,315	0.53200	Brazil	9,584	0.72800
Paraguay	4,353	0.67000	South Africa	9,604	0.62500
Guatemala	4,365	0.58000	Saint Lucia	9,739	0.72400
Syria	4,512	0.64600	Serbia	9,772	0.76900
Georgia	4,516	0.74000	Saint Vincent	9,900	0.73200
Jordan	5,083	0.69900	Costa Rica	10,392	0.77000
Angola	5,166	0.50400	Iran	10,398	0.74200
Egypt	5,216	0.66100	Kazakhstan	10,469	0.75000
Swaziland	5,293	0.53600	Grenada	10,531	0.77000
Armenia	5,615	0.72600	Montenegro	10,546	0.79100
China	5,712	0.69500	Dominica	10,969	0.74400
Namibia	5,739	0.60600	Lebanon	11,028	0.74400
El Salvador	6,151	0.67900	Uruguay	11,412	0.78900
Belize	6,219	0.70100	Belarus	11,457	0.78900
Turkmenistan	6,567	0.69300	Mauritius	11,560	0.73500
Ukraine	6,734	0.73700	Panama	11,675	0.77600
Suriname	6,753	0.68100	Romania	11,782	0.78400
Ecuador	7,128	0.72200	Venezuela	11,878	0.74600
Albania	7,216	0.74800	Bulgaria	11,992	0.78000

* Bosnia and Herzegovina

	GDP per capita PPP 2011	HDI 2011		GDP per capita PPP 2011	HDI 2011
Turkey	12,406	0.720	Greece	26,113	0.862
Botswana	12,562	0.634	Cyprus	26,456	0.849
Palau	12,706	0.786	Slovenia	27,225	0.892
Mexico	12,893	0.773	Spain	28,353	0.885
Malaysia	12,942	0.766	Italy	28,454	0.881
Argentina	13,276	0.810	France	30,272	0.893
Gabon	13,442	0.679	Bahamas	30,335	0.792
Chile	14,111	0.817	Eq. Guinea	30,988	0.551
Russia	14,767	0.784	Japan	31,323	0.910
Saint Kitts	15,033	0.745	Finland	33,443	0.892
Libya	15,322	0.725	Belgium	33,617	0.897
Latvia	15,647	0.809	United Kingdom	33,718	0.875
Poland	16,455	0.819	Germany	33,829	0.919
Croatia	17,300	0.804	Denmark	34,123	0.901
Lithuania	17,599	0.814	Sweden	34,301	0.915
Hungary	17,901	0.830	Australia	34,406	0.936
Barbados	18,586	0.824	Canada	35,948	0.910
Antigua and Barbuda	18,629	0.759	Austria	36,177	0.894
Estonia	18,941	0.844	Iceland	36,656	0.905
Seychelles	20,357	0.804	Netherlands	38,106	0.921
Slovakia	20,403	0.838	Switzerland	38,160	0.912
Saudi Arabia	20,565	0.780	Ireland	39,294	0.915
Portugal	22,037	0.817	Hong Kong, China (SAR)	40,579	0.904
Malta	22,922	0.846	United States	43,070	0.936
Bahrain	23,755	0.795	Brunei Darussalam	46,820	0.854
Trinidad and Tobago	24,151	0.759	Singapore	48,160	0.894
Czech R.	24,359	0.872	Norway	48,583	0.953
Oman	24,646	0.729	Kuwait	49,952	0.788
N. Zealand	25,037	0.918	United Arab Emirates	51,361	0.817
Korea	25,339	0.907	Qatar	67,334	0.832
Israel	25,646	0.899	Luxembourg	73,350	0.875

Source: UDNPd

Annex 6 GDP and HDI Ranking 2011

	HDI rank	GDP rank	Difference
Egypt	109	105	4
Iran	72	75	-3
S. Arabia	55	41	14
Turkey	88	62	26
Algeria	90	91	-1
Bahrain	46	38	8
Iraq	129	126	3
Israel	16	32	-16
Jordan	98	107	-9
Kuwait	51	4	47
Lebanon	70	70	0
Libya	85	52	33
Mauritania	151	138	13
Morocco	127	117	10
Oman	81	35	46
oPt*	NA	NA	
Qatar	34	2	32
Sudan	166	144	22
Syria	113	109	4
Tunisia	92	84	8
UAE	38	3	35
Western Sahara	NA	NA	
Yemen	137	154	-17

Source: UNDPd

* occupied Palestinian territories

Annex 7 Economic Growth

	GDP per capita (1990 Int. GK$)					GDP per capita growth			
	Egypt	Iran	S.Arabia	Turkey		Egypt	Iran	S.Arabia	Turkey
1950	910	1,720	2,231	1,623	1950	0	0	0	0
1951	905	1,674	2,374	1,784	1951	-0.58	-2.67	6.42	9.95
1952	900	1,629	2,470	1,947	1952	-0.51	-2.67	4.04	9.12
1953	894	1,588	2,664	2,108	1953	-0.64	-2.54	7.88	8.27
1954	889	1,546	2,912	1,993	1954	-0.58	-2.64	9.29	-5.47
1955	885	1,504	2,922	2,093	1955	-0.52	-2.67	0.35	5.02
1956	905	1,594	3,075	2,097	1956	2.31	5.96	5.23	0.21
1957	925	1,767	3,119	2,194	1957	2.27	10.85	1.43	4.61
1958	947	1,918	3,204	2,222	1958	2.30	8.55	2.73	1.27
1959	969	2,024	3,458	2,252	1959	2.33	5.51	7.92	1.35
1960	991	2,156	3,719	2,247	1960	2.34	6.56	7.55	-0.19
1961	1,031	2,272	4,066	2,221	1961	3.98	5.38	9.34	-1.17
1962	1,074	2,250	4,445	2,297	1962	4.20	-0.98	9.32	3.41
1963	1,120	2,426	4,715	2,454	1963	4.30	7.81	6.08	6.83
1964	1,166	2,526	5,005	2,496	1964	4.12	4.12	6.13	1.73
1965	1,213	2,753	5,469	2,504	1965	4.03	8.99	9.29	0.32
1966	1,192	2,940	6,102	2,735	1966	-1.76	6.78	11.57	9.21
1967	1,151	3,176	6,463	2,795	1967	-3.42	8.05	5.92	2.19
1968	1,146	3,550	6,848	2,917	1968	-0.48	11.77	5.96	4.36
1969	1,201	3,897	7,170	3,002	1969	4.83	9.77	4.70	2.92
1970	1,254	4,189	7,624	3,078	1970	4.41	7.48	6.33	2.54
1971	1,283	4,577	8,475	3,282	1971	2.31	9.26	11.17	6.61
1972	1,284	5,174	9,497	3,412	1972	0.07	13.04	12.05	3.97
1973	1,294	5,462	11,040	3,477	1973	0.81	5.58	16.25	1.89
1974	1,317	5,778	12,333	3,665	1974	1.71	5.78	11.71	5.43
1975	1,421	5,883	11,787	3,895	1975	7.92	1.81	-4.42	6.26
1976	1,606	6,691	12,106	4,138	1976	13.07	13.75	2.70	6.24
1977	1,767	6,402	13,064	4,224	1977	9.99	-4.32	7.92	2.09
1978	1,844	5,464	12,919	4,255	1978	4.36	-14.66	-1.11	0.72
1979	1,930	4,817	12,843	4,133	1979	4.66	-11.84	-0.59	-2.86
1980	2,069	3,974	13,217	4,022	1980	7.23	-17.51	2.92	-2.70
1981	2,076	3,693	13,421	4,087	1981	0.30	-7.07	1.54	1.61
1982	2,223	4,100	12,883	4,182	1982	7.08	11.03	-4.01	2.34
1983	2,322	4,459	10,863	4,230	1983	4.47	8.77	-15.67	1.14
1984	2,390	4,361	10,253	4,367	1984	2.92	-2.21	-5.62	3.24
1985	2,471	4,299	9,048	4,485	1985	3.40	-1.42	-11.76	2.72
1986	2,460	3,754	8,091	4,695	1986	-0.43	-12.68	-10.57	4.68
1987	2,465	3,584	8,105	4,998	1987	0.19	-4.53	0.17	6.45
1988	2,510	3,293	8,027	5,086	1988	1.84	-8.10	-0.96	1.76
1989	2,528	3,327	8,004	5,041	1989	0.70	1.01	-0.29	-0.88

	GDP per capita (1990 Int. GK$)					GDP per capita growth (%)			
	Egypt	Iran	S.Arabia	Turkey		Egypt	Iran	S.Arabia	Turkey
1990	2,523	3,526	8,993	5,399	1990	-0.20	6.00	12.36	7.10
1991	2,381	3,759	9,602	5,346	1991	-5.61	6.62	6.77	-0.98
1992	2,408	3,908	9,498	5,562	1992	1.10	3.95	-1.08	4.03
1993	2,395	3,980	8,860	5,902	1993	-0.54	1.84	-6.72	6.11
1994	2,437	4,069	8,415	5,482	1994	1.78	2.25	-5.02	-7.11
1995	2,496	4,162	8,091	5,775	1995	2.42	2.28	-3.85	5.33
1996	2,565	4,359	7,942	6,073	1996	2.74	4.73	-1.84	5.18
1997	2,647	4,535	7,872	6,421	1997	3.21	4.04	-0.89	5.72
1998	2,738	4,580	7,783	6,508	1998	3.43	0.98	-1.12	1.36
1999	2,843	4,635	7,509	6,101	1999	3.84	1.22	-3.52	-6.25
2000	2,936	4,838	7,650	6,446	2000	3.26	4.37	1.87	5.65
2001	2,979	4,979	7,469	5,869	2001	1.46	2.92	-2.36	-8.95
2002	3,015	5,188	7,273	6,234	2002	1.20	4.19	-2.63	6.23
2003	3,052	3,995	7,629	6,499	2003	1.25	-23.00	4.90	4.24
2004	3,119	5,810	7,835	6,974	2004	2.18	45.45	2.69	7.31
2005	3,200	6,045	8,079	7,449	2005	2.62	4.04	3.12	6.82
2006	3,358	6,367	8,152	7,850	2006	4.92	5.33	0.90	5.37
2007	3,534	6,824	8,244	8,104	2007	5.25	7.19	1.13	3.24
2008	3,725	6,944	8,435	8,066	2008	5.39	1.76	2.32	-0.47

Source: Maddison

Formula: (b / a) * 100 - 100 = c

year	GDP per capita	growth
1	a	
2	b	c

	GDP per capita (1990 Int. G$)				Annual growth rate (%)			
	Egypt	Iran	S.Arabia	Turkey	Egypt	Iran	S.Arabia	Turkey
1950	910	1,720	2,231	1,623				
1955	885	1,504	2,922	2,093	-0.6	-2.6	5.5	5.2
1960	991	2,156	3,719	2,247	2.3	7.5	4.9	1.4
1965	1,213	2,753	5,469	2,504	4.1	5.0	8.0	2.2
1970	1,254	4,189	7,624	3,078	0.7	8.8	6.9	4.2
1975	1,421	5,883	11,787	3,895	2.5	7.0	9.1	4.8
1980	2,069	3,974	13,217	4,022	7.8	-7.5	2.3	0.6
1985	2,471	4,299	9,048	4,485	3.6	1.6	-7.3	2.2
1990	2,523	3,526	8,993	5,399	0.4	-3.9	-0.1	3.8
1995	2,496	4,162	8,091	5,775	-0.2	3.4	-2.1	1.4
2000	2,936	4,838	7,650	6,446	3.3	3.1	-1.1	2.2
2005	3,200	6,045	8,079	7,449	1.7	4.6	1.1	2.9
2008	3,725	6,944	8,435	8,066	5.2	4.7	1.4	2.7

Source: Maddison

Formula: [(b / a) ^ 1/5 – 1] * 100 = c

	GDP per capita	Annual growth rate (%)
1	a	
2	b	c

Annex 8 Inflation

	Inflation, consumer prices (annual , %)			
	Egypt	Iran	S.Arabia	Turkey
1961	0.693607	3.162564		0.514139
1962	-3.00308	0.721321		2.941176
1963	0.746646	0.37185		3.10559
1964	3.660983	3.81449	2.8	1.686747
1965	14.839	2.154375	0.389105	5.924171
1966	9.036441	-0.38815	1.550388	4.362416
1967	0.701897	1.59761	2.099237	6.752412
1968	-1.67576	0.690361	1.588785	0.401606
1969	3.40982	3.593195	3.49586	7.866667
1970	3.762899	1.666871	0.177778	6.929852
1971	3.140422	4.195298	4.475	15.74308
1972	2.102363	6.398241	4.33118	11.66667
1973	5.112184	9.819487	16.51376	15.43966
1974	10.02432	14.24894	21.43701	15.81521
1975	9.669695	12.87918	34.57611	19.19973
1976	10.31742	11.25614	31.55866	17.36294
1977	12.73216	27.28778	11.39901	27.0809
1978	11.0781	11.72197	-1.5836	45.28457
1979	9.904361	10.48724	1.081567	58.69203
1980	20.81922	20.64391	4.169267	110.1732
1981	10.31728	24.20359	2.798982	36.57547
1982	14.82301	18.68973	1.02104	30.83768
1983	16.07987	19.74019	0.191424	31.40449
1984	17.03637	12.54022	-1.55904	48.37782
1985	12.10676	4.389341	-3.05877	44.96021
1986	23.86429	18.429	-3.20333	34.61942
1987	19.69359	28.57143	-1.54712	38.84621
1988	17.66349	28.67063	0.907563	73.66667
1989	21.26187	22.34965	1.032645	63.27255
1990	16.75637	7.627675	2.077151	60.3127
1991	19.74854	17.12857	4.861111	65.96942
1992	13.63742	25.80772	-0.07701	70.07279
1993	12.08979	21.20263	1.055795	66.09708
1994	8.154231	31.44703	0.564325	106.2627
1995	15.74223	49.65599	4.868431	88.1077
1996	7.187104	28.93734	1.22207	80.3469
1997	4.625606	17.34923	0.057151	85.73324
1998	3.872575	17.86613	-0.35699	84.64134
1999	3.079499	20.07071	-1.34789	64.86748
2000	2.683805	14.47675	-1.125	54.91538

	Inflation, consumer prices (annual %)			
	Egypt	Iran	S.Arabia	Turkey
2001	2.269757	11.27425	-1.11252	54.40018
2002	2.737239	14.33593	0.23012	44.96412
2003	4.507776	16.46801	0.586735	25.29637
2004	11.27062	14.76151	0.329698	10.58424
2005	4.869397	13.43312	0.69936	10.1384
2006	7.644526	11.93955	2.207347	10.51098
2007	9.318969	17.21305	4.168713	8.756181
2008	18.31683	25.54984	9.868752	10.44413
2009	11.7635	13.50026	5.066632	6.250977
2010	11.26519	10.13715	5.343137	8.566444

Source: WBf

Annex 9 Child Mortality

	Under Five Mortality				
	MENA*	Egypt	Iran	S.Arabie	Turkey
1960	261	298	265		258
1961	253	292	259		252
1962	246	284	251		244
1963	239	278	243		236
1964	232	271	236		228
1965	224	264	229		221
1966	227	258	264		214
1967	218	252	247		208
1968	209	247	231		203
1969	201	242	216		199
1970	193	237	203	179	194
1971	186	233	189	171	189
1972	180	229	178	159	184
1973	171	224	167	148	177
1974	164	218	156	138	171
1975	157	211	146	128	164
1976	150	203	137	119	156
1977	143	194	129	110	149
1978	135	184	122	103	142
1979	127	175	114	96	136
1980	119	165	107	89	130
1981	112	155	99	83	122
1982	104	145	93	77	115
1983	97	135	87	71	109
1984	91	125	82	66	102
1985	86	116	78	62	96
1986	81	108	73	57	90
1987	77	102	70	53	84
1988	73	96	67	49	80
1989	70	91	64	46	76
1990	67	86	61	43	72
1991	64	81	59	40	68
1992	62	76	56	37	65
1993	59	71	54	34	61
1994	57	67	52	32	57
1995	54	62	49	30	53
1996	52	59	48	28	48
1997	50	55	47	26	45
1998	48	51	46	24	41
1999	46	48	46	22	38

	Under Five Mortality				
	MENA*	Egypt	Iran	S.Arabie	Turkey
2000	45	44	44	21	35
2001	43	42	41	19	33
2002	41	39	39	18	30
2003	40	36	37	17	28
2004	38	34	35	15	26
2005	37	32	34	14	24
2006	35	30	32	13	22
2007	34	28	31	12	21
2008	33	26	29	12	19
2009	32	24	27	11	18
2010	31	23	26	10	16

Source: WBg

* excludes Turkey, Sudan, and Mauritania

Annex 10 Adult Literacy

	Adult Literacy Rate (15+)			
	Egypt	Iran	S. Arabia	Turkey
1975				61.6
1976	38.2	36.5		
1980				65.7
1985				76
1986	44.4	52.3		
1990				79.2
1991		65.5		
1992			70.8	
1996	55.6	73.1		
2000			79.4	
2002		77		
2004			82.9	87.4
2005		82.4		88.2
2006	66.4	82.3		88.1
2007				88.7
2008		85		
2009				90.8
2010	72		86.6	

Source: UIS

Annex 11 Mean and Expected Years of Schooling

	Mean Years of Schooling								
	1980	1990	2000	2005	2006	2007	2008	2009	2010
Egypt	2.1	3.5	4.7	5.5	5.7	5.9	6	6.2	6.4
Iran	2.1	3.8	6	7	7.2	7.4	7.5	7.7	7.8
S.Arabia	4.2	5.5	6.6	7.2	7.3	7.5	7.6	7.7	7.8
Turkey	2.9	4.5	5.5	6.1	6.1	6.2	6.3	6.4	6.5

Source: UNDPe

	Expected Years of Schooling								
	1980	1990	2000	2005	2006	2007	2008	2009	2010
Egypt	7.3	9.1	11.6	11.7	11.7	11.7	11.7	11.7	12.1
Iran	8.7	9.2	11.9	11.5	12.8	12.2	12.9	13.1	14.4
S.Arabia	6	8.8	11.5	12.8	12.8	13.1	13.3	13.7	14.3
Turkey	7.4	8.8	10.6	11.7	12.1	12.4	12.3	12.9	12.9

Source: UNDPf

Annex 12 Adult Literacy Gap and School Enrollment Ratios

	Adult Literacy (15+) - male (%)			
	Egypt	Iran	S. Arabia	Turkey
1975				77.5
1976	53.6	48.2		
1980				81.4
1985				87.6
1986	57	63.1		
1990				89.8
1991		74.3		
1992			80	
1996	67.2	79.9		
2000			87.1	
2002		83.5		
2004			87.5	95.3
2005		88		96
2006	74.6	87.3		96
2007				96.2
2008		89.3		
2009				96.4
2010	80.3		90.4	
increase (percentage points)	26.7	41.1	10.4	18.9

Source: UIC

	Adult Literacy (15+) - female (%)			
	Egypt	Iran	S. Arabia	Turkey
1975				45.1
1976	22.4	24.4		
1980				49.8
1985				64.2
1986	31.4	41		
1990				68.5
1991		56.2		
1992			57.3	
1996	43.6	66.1		
2000			69.3	
2002		70.4		
2004			76.3	79.6
2005		76.8		80.5
2006	57.8	77.2		80.4
2007				81.3
2008		80.7		
2009				85.3
2010	63.5		81.3	
increase (percentage points)	41.1	56.3	24	40.2

Source: UIC

	Adult Literacy (15+) - gap (%)			
	Egypt	Iran	S.Arabia	Turkey
1975				32.4
1976	31.2	23.8		
1980				31.6
1985				23.4
1986	25.6	22.1		
1990				21.3
1991		18.1		
1992			22.7	
1996	23.6	13.8		
2000			17.8	
2002		13.1		
2004			11.2	15.7
2005		11.2		15.5
2006	16.8	10.1		15.6
2007				14.9
2008		8.6		
2009				11.1
2010	16.8		9.1	
reduction (percentage points)	14.4	15.2	13.6	21.3

	School Enrollment Ratios - Females to Males Enrolled (%)					
	Egypt			Iran		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
1971	62.6	48.8	36.9	58.1	53.2	36.1
1972	62.6	49.9	37.7	58.3	55.6	45.4
1973	62.6	51.0	40.4	58.7	56.8	46.1
1974	63.1	52.1	41.1	58.6	57.4	44.8
1975	63.3	51.1	41.9	61.3	58.5	43.1
1976	64.2	53.6	43.8	64.4	59.0	42.2
1977	65.1	55.4	40.9	66.2	60.1	45.9
1978	66.3	55.9	41.4	67.9		49.5
1979	67.5	57.7	43.4			
1980	68.4	58.1	44.4			
1981	69.8	60.3	46.2			
1982	71.1	61.9	46.9	71.1		
1983	72.8	63.4	47.9	73.6		
1984	75.0	64.8	47.4	77.4		
1985	77.1	66.2	50.8	79.8	70.1	
1986	78.9	68.0	43.5	81.8		
1987	80.3	69.5	41.1	82.4		
1988	77.5	71.5	50.2	84.3	68.3	
1989	82.1	73.1	52.2	86.4		
1990	83.6	76.6	53.6	88.5	71.1	
1991	82.8	79.0	58.9	90.4	74.5	
1992	84.9	83.4		91.7	75.5	
1993	85.7	84.0		92.9	78.1	
1994	84.3	83.0		93.6	80.5	
1995	87.6	86.6		93.5	83.9	
1996	75.3	86.5				59.2
1997	86.7	86.2		93.2	90.5	
1998						
1999	91.2	91.0		93.9	92.8	79.8
2000	92.0	92.2		94.5	93.8	86.3
2001	92.9	93.0		94.9	94.3	94.4
2002	93.7			95.5	94.4	100.2
2003	94.7	93.3		96.2	93.9	106.4
2004	95.7	93.7	76.6	97.0	96.0	108.3
2005	93.7			98.0	96.4	106.0
2006	94.0			98.3	97.2	108.0
2007	94.8			98.9	101.1	112.4
2008				99.2	97.8	115.3
2009	95.6	96.2		99.0	96.8	107.0
2010	95.9	96.2	90.5	99.1	96.3	100.8

Source: WBh, WBi, and WBj

	School Enrollment Ratios - Females to Males Enrolled (%)					
	S.Arabia			Turkey		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
1971			9.5	74.4	42.2	25.0
1972			12.3	75.9	42.3	25.5
1973			14.6	77.4	43.5	25.5
1974			16.6	78.8	44.9	26.7
1975			19.4	80.2		22.4
1976			28.4	81.0	46.5	20.1
1977			32.4	81.6	46.5	23.5
1978			31.4	82.4	46.4	27.6
1979	61.1	58.4	36.0	82.8	47.9	30.7
1980			39.0		48.4	31.7
1981			44.9	83.5		
1982			49.2	85.7	52.6	35.3
1983			54.1		53.7	43.4
1984			62.3	88.3	54.3	50.9
1985			66.2	89.8		46.0
1986			72.6	90.7	54.6	47.9
1987			79.8	90.7	55.3	50.3
1988				91.0	56.4	50.1
1989				91.0	57.9	50.7
1990				91.1	59.3	50.6
1991			100.1	91.1	60.6	50.7
1992			79.3	91.3	62.2	51.7
1993			93.3	91.7	63.5	53.0
1994			82.5	92.6	65.8	59.7
1995			84.0	92.8	65.3	62.3
1996			84.4			
1997			85.9	92.0	68.1	54.8
1998			110.4			66.2
1999			120.8	91.4	68.6	66.7
2000			126.6	91.5	72.9	66.9
2001			120.5	92.5	73.0	70.3
2002			129.8	93.3	72.8	72.1
2003			146.4	93.8	73.1	74.8
2004			150.3	94.7	77.5	72.3
2005	99.6	93.3	144.9	95.2	83.5	73.8
2006			141.4	96.2	84.4	75.3
2007	98.8		125.3	97.0	85.5	76.0
2008	98.5	89.1	125.0	97.5	88.6	77.7
2009	98.1	89.8	123.7	98.3	91.5	79.3
2010	99.5		111.8	98.8	91.9	82.0

Source: WBh, WBi, and WBj

Annex 13 Life Expectancy Gap and Maternal Mortality

	Life Expectancy at Birth					
	Egypt			Iran		
	Female	Male	Gap	Female	Male	Gap
1960	46.8	45.1	1.8	43.9	45.3	-1.4
1961	47.3	45.5	1.8	44.7	45.9	-1.2
1962	47.7	45.9	1.8	45.6	46.5	-0.9
1963	48.1	46.3	1.8	46.4	47.2	-0.7
1964	48.6	46.8	1.8	47.3	47.8	-0.5
1965	49.0	47.2	1.8	48.1	48.3	-0.3
1966	49.5	47.7	1.8	48.8	48.9	-0.1
1967	49.9	48.1	1.8	49.5	49.4	0.1
1968	50.4	48.6	1.8	50.2	50.0	0.2
1969	50.9	49.1	1.8	50.8	50.5	0.3
1970	51.4	49.6	1.8	51.4	51.1	0.2
1971	51.9	50.1	1.8	52.0	51.9	0.0
1972	52.4	50.6	1.9	52.6	52.9	-0.3
1973	53.0	51.1	2.0	53.2	54.0	-0.8
1974	53.6	51.6	2.0	53.9	55.0	-1.1
1975	54.3	52.1	2.1	54.7	55.7	-1.0
1976	54.9	52.7	2.2	55.5	55.6	-0.1
1977	55.5	53.2	2.3	56.3	54.5	1.9
1978	56.2	53.8	2.4	57.2	52.4	4.8
1979	56.8	54.3	2.5	58.0	49.4	8.6
1980	57.5	54.9	2.6	58.9	46.1	12.7
1981	58.1	55.5	2.6	59.7	43.0	16.7
1982	58.7	56.0	2.7	60.5	40.7	19.8
1983	59.3	56.5	2.7	61.3	39.5	21.8
1984	59.9	57.1	2.8	62.0	39.6	22.4
1985	60.4	57.6	2.8	62.7	41.1	21.7
1986	61.0	58.2	2.9	63.4	43.7	19.7
1987	61.7	58.7	2.9	64.1	47.2	16.9
1988	62.3	59.3	3.0	64.7	50.9	13.7
1989	63.0	59.8	3.1	65.2	54.7	10.5
1990	63.7	60.4	3.2	65.8	58.2	7.5
1991	64.4	61.1	3.3	66.3	61.3	5.0
1992	65.1	61.7	3.4	66.8	63.8	3.1
1993	65.9	62.4	3.5	67.4	65.7	1.7
1994	66.7	63.1	3.5	67.9	67.1	0.8
1995	67.4	63.9	3.6	68.4	67.9	0.5
1996	68.2	64.6	3.6	69.0	68.3	0.7
1997	68.9	65.3	3.6	69.5	68.4	1.1

1998	69.6	66.0	3.6	69.9	68.5	1.5
1999	70.3	66.7	3.7	70.4	68.5	1.9
2000	71.0	67.3	3.7	70.8	68.7	2.2
2001	71.6	67.9	3.7	71.3	68.9	2.4
2002	72.1	68.4	3.7	71.7	69.1	2.6
2003	72.6	68.9	3.7	72.1	69.4	2.8
2004	73.1	69.3	3.7	72.5	69.6	3.0
2005	73.5	69.7	3.8	72.9	69.8	3.1
2006	73.8	70.0	3.8	73.3	70.0	3.3
2007	74.1	70.3	3.8	73.7	70.2	3.5
2008	74.4	70.6	3.8	74.1	70.5	3.6
2009	74.7	70.9	3.8	74.4	70.7	3.7
2010	75.0	71.1	3.9	74.7	70.9	3.7

Source: WBk and WBl

	Life Expectancy at Birth					
	S.Arabia			Turkey		
	Female	Male	Gap	Female	Male	Gap
1960	46.6	43.3	3.3	50.0	46.6	3.3
1961	47.2	43.9	3.3	50.1	46.7	3.4
1962	47.8	44.5	3.3	50.2	46.7	3.5
1963	48.4	45.2	3.3	50.3	46.8	3.6
1964	49.1	45.9	3.3	50.4	46.8	3.6
1965	49.8	46.6	3.3	50.6	46.8	3.7
1966	50.6	47.4	3.3	50.7	47.0	3.8
1967	51.4	48.2	3.3	50.9	47.1	3.8
1968	52.3	49.0	3.2	51.2	47.4	3.9
1969	53.2	49.9	3.2	51.6	47.7	3.9
1970	54.1	50.9	3.2	52.0	48.1	4.0
1971	55.0	51.9	3.1	52.5	48.5	4.0
1972	56.0	52.9	3.0	53.1	49.1	4.0
1973	56.9	54.0	2.9	53.7	49.6	4.1
1974	57.9	55.1	2.8	54.3	50.3	4.1
1975	58.8	56.2	2.6	55.0	50.9	4.1
1976	59.7	57.3	2.4	55.7	51.6	4.1
1977	60.7	58.4	2.3	56.4	52.3	4.1
1978	61.6	59.4	2.2	57.2	53.1	4.1
1979	62.5	60.4	2.1	57.9	53.8	4.1
1980	63.3	61.3	2.0	58.7	54.6	4.1
1981	64.2	62.2	2.0	59.4	55.3	4.1
1982	65.0	62.9	2.0	60.2	56.0	4.1
1983	65.7	63.7	2.1	60.9	56.7	4.1
1984	66.5	64.4	2.1	61.6	57.4	4.2
1985	67.1	65.0	2.2	62.3	58.1	4.2
1986	67.8	65.6	2.2	62.9	58.7	4.2
1987	68.4	66.1	2.3	63.5	59.3	4.3
1988	69.0	66.7	2.3	64.1	59.9	4.3
1989	69.5	67.2	2.3	64.7	60.4	4.3
1990	70.0	67.6	2.4	65.3	61.0	4.3
1991	70.4	68.0	2.4	65.8	61.5	4.3
1992	70.9	68.4	2.5	66.4	62.1	4.3
1993	71.2	68.7	2.5	67.0	62.7	4.3
1994	71.5	69.0	2.6	67.6	63.3	4.3
1995	71.8	69.2	2.6	68.3	64.0	4.3
1996	72.1	69.4	2.7	69.0	64.6	4.3
1997	72.3	69.6	2.7	69.7	65.3	4.4
1998	72.5	69.8	2.7	70.4	66.0	4.4

1999	72.7	70.0	2.7	71.1	66.6	4.4
2000	72.9	70.2	2.7	71.7	67.3	4.4
2001	73.1	70.4	2.7	72.4	67.9	4.5
2002	73.3	70.6	2.7	72.9	68.4	4.5
2003	73.5	70.9	2.6	73.5	69.0	4.5
2004	73.7	71.2	2.5	74.0	69.4	4.5
2005	73.9	71.5	2.4	74.4	69.9	4.6
2006	74.1	71.8	2.3	74.8	70.2	4.6
2007	74.3	72.1	2.2	75.2	70.6	4.6
2008	74.5	72.3	2.2	75.5	70.9	4.6
2009	74.8	72.6	2.2	75.8	71.2	4.6
2010	75.0	72.8	2.2	76.0	71.5	4.6

Source: WBk and WBl

Maternal mortality ratio (modeled estimate, per 100,000 live births)						
	1990	1995	2000	2005	2010	reduction
Egypt	230	150	100	78	66	164
Iran	120	72	48	30	21	99
S. Arabia	44	33	27	25	24	20
Turkey	67	51	39	28	20	47
MENA*	200	150	120	90	74	126

Source: WBm

* excludes Mauritania, Sudan and Turkey

Annex 14 Women's Labor Participation Rate

Labor participation rate, female (% of female population ages 15+)					
	Egypt	Iran	S. Arabia	Turkey	MENA*
1990	26.5	9.7	14.5	34.5	18.3
1991	22.5	9.8	14.5	34.4	17.5
1992	22.6	10	14.7	33	17.7
1993	21.9	10.1	15	27	17.7
1994	22.7	10.3	15.3	31.5	18.2
1995	21.3	10.4	15.6	31.2	18.2
1996	20.6	10.6	15.6	30.7	18.3
1997	19.8	11.4	15.8	28.9	18.4
1998	19.1	12.1	16.1	29.3	18.5
1999	19.7	13	16.6	30.1	19.0
2000	19.9	13.9	16.2	26.6	19.2
2001	20.1	14.8	16	27.1	19.1
2002	18.9	15.8	16	27.9	19.0
2003	19.4	16.9	16.5	26.6	19.7
2004	20	18.1	17.1	23.8	20.3
2005	20.6	19.4	17.6	23.8	20.7
2006	20.9	18.5	18.2	24	20.6
2007	22.8	17.6	17.8	24.1	20.9
2008	23.1	15.4	17.5	24.9	20.6
2009	23.3	15.7	17.1	26.5	20.6
2010	23.5	16.1	17.4	28.1	20.9

Source: WBn

* excludes Mauritania, Sudan and Turkey

Annex 15 Economic Growth Comparison

Egypt	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GDP growth (annual %) (1)	3.53	2.37	3.19	4.09	4.47	6.84	7.08	7.15	4.68	5.14
GDP per capita growth PPP (2)	1.46	1.2	1.25	2.18	2.62	4.92	5.25	5.39	na	na
Iran	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GDP growth (annual %) (1)	3.66	7.51	7.11	5.08	4.62	5.89	7.82	2.3	1.8	na
GDP per capita growth PPP (2)	2.92	4.19	-23	45.45	4.04	5.33	7.19	1.76	na	na
S. Arabia	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GDP growth (annual %) (1)	0.54	0.12	7.65	5.26	5.55	3.15	2.01	4.22	0.09	4.64
GDP per capita growth PPP (2)	-2.36	-2.63	4.9	2.69	3.12	0.9	1.13	2.32	na	na
Turkey	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GDP growth (annual %) (1)	-5.69	6.16	5.26	9.36	8.40	6.89	4.66	0.65	-4.82	9.15
GDP per capita growth PPP (2)	-8.95	6.23	4.24	7.31	6.82	5.37	3.24	-0.47	na	na

(1) WB

(2) Maddison

For indicative purposes only and to compensate for the lack of data after the Maddiosn dataset ends - both are different measures.

Annex 16 Oil Export Revenues

	Oil exports			Export revenues	
	Thousand barrels daily		Price of oil	Millions of dollars	
	Iran	S.Arabie	$ 2011	Iran	S.Arabie
1965	1,708	1,828	13	7,990	8,555
1966	1,911	2,221	12	8,696	10,109
1967	2,358	2,428	12	10,433	10,739
1968	2,571	2,681	12	10,912	11,382
1969	3,078	2,858	11	12,401	11,516
1970	3,504	3,443	10	13,327	13,096
1971	4,191	4,410	12	19,016	20,007
1972	4,638	5,632	13	22,582	27,422
1973	5,416	7,227	17	32,935	43,948
1974	5,530	8,130	53	106,670	156,836
1975	4,781	6,850	48	84,128	120,530
1976	5,293	8,334	51	97,741	153,892
1977	5,044	8,919	52	95,054	168,083
1978	4,574	8,017	48	80,762	141,534
1979	2,453	9,188	98	87,689	328,438
1980	817	9,663	101	29,983	354,601
1981	730	9,529	89	23,681	309,225
1982	1,756	6,156	77	49,253	172,688
1983	1,682	4,073	67	40,984	99,222
1984	1,212	3,605	62	27,571	81,983
1985	1,286	2,646	58	27,041	55,647
1986	1,170	4,259	30	12,649	46,041
1987	1,418	3,609	37	18,885	48,085
1988	1,544	4,733	28	15,998	49,032
1989	1,950	4,656	33	23,536	56,183
1990	2,254	5,947	41	33,585	88,628
1991	2,424	7,585	33	29,235	91,469
1992	2,403	7,909	31	27,173	89,432
1993	2,606	7,737	26	25,134	74,606
1994	2,572	7,725	24	22,543	67,702
1995	2,499	7,794	25	22,909	71,457
1996	2,468	7,874	30	26,694	85,160
1997	2,482	8,004	27	24,239	78,181
1998	2,592	7,917	18	16,607	50,712
1999	2,311	7,258	24	20,465	64,272
2000	2,487	7,861	37	33,781	106,790
2001	2,433	7,535	31	27,574	85,400
2002	2,100	7,209	31	23,983	82,331

2003	2,428	8,327	35	31,234	107,131
2004	2,568	8,651	46	42,721	143,895
2005	2,488	9,063	63	57,028	207,735
2006	2,454	8,732	73	65,101	231,673
2007	2,460	8,208	79	70,505	235,281
2008	2,490	8,430	102	92,351	312,663

Source: BP

Annex 17 Military Expenditures

	Military expenditure by country (% of GDP)						
	Egypt	Iran	Saudi Arabia	Turkey	Algeria	Bahrain	Iraq
1990	4.7	2	14	3.5	1.5	4.8	. .
1991	4.8	1.7	12.5	3.8	1.2	5.1	. .
1992	4.5	1.4	11.3	3.9	2.1	5.3	. .
1993	4.3	1.5	12.5	3.9	2.5	4.8	. .
1994	4.2	2.4	10.6	4.1	3.1	4.6	. .
1995	3.9	1.8	9.3	3.9	2.9	4.7	. .
1996	3.5	1.9	8.5	4.1	3.1	4.7	. .
1997	3.3	2.1	11	4.1	3.6	4.6	. .
1998	3.3	2.4	14.3	3.3	4.0	4.8	. .
1999	3.2	3	11.4	4.0	3.8	4.9	. .
2000	3.2	3.8	10.6	3.7	3.4	4	. .
2001	3.3	4	11.5	3.7	3.8	4.2	. .
2002	3.4	2.5	9.8	3.9	3.7	4.7	. .
2003	3.3	2.8	8.7	3.4	3.3	4.8	. .
2004	3	3.1	8.4	2.8	3.3	4.3	1.7
2005	2.9	3.5	8	2.5	2.8	3.6	2.2
2006	2.7	3.5	8.3	2.5	2.6	3.4	1.9
2007	2.5	2.7	9.2	2.3	2.9	3.2	2.2
2008	2.3	2.1	8	2.3	3.0	3	2.2
2009	2.1	2.2	11	2.6	3.8	3.9	2.5
2010	2		10	2.4	3.5	3.5	2.5

Source: SIPRI

	Military expenditure by country (% of GDP)						
	Israel	Jordan	Kuwait	Lebanon	Libya	Mauritania	Morocco
1990	14.4	7.8	48.5	7.5	. .	3.8	4.1
1991	17.7	10	117	5.1	. .	3.6	4.1
1992	12.9	6.9	31.8	7.9	. .	2.7	4.3
1993	13.3	7	12.4	6	. .	2.4	4.7
1994	11.5	6.7	13.3	6.9	. .	2.2	4.5
1995	8.9	4.5	13.6	6.6	. .	2.3	4.3
1996	9.1	6	10.3	5.6	. .	2.6	3.9
1997	9.2	6.1	8.1	4.3	4.1	3	4.2
1998	8.7	6.3	8.8	4	5.3	2.1	3.6
1999	8.4	6.3	7.6	4.8	3.8	2.7	3
2000	8	6.3	7.2	5.4	3.1	3.5	2.3
2001	8.4	5.9	7.7	5.4	2.7	4.6	3.9
2002	9.6	5.4	7.4	4.7	2.2	3.2	3.6
2003	9.6	6	6.5	4.6	1.9	4.9	3.7
2004	8.7	5.1	5.8	4.4	1.9	4.9	3.4
2005	8	4.8	4.3	4.4	1.4	3.7	3.4
2006	8.1	4.7	3.5	4.5	1	3	3.3
2007	7.5	5.9	3.6	4.6	0.9	. .	3.2
2008	7.1	6.1	3	3.9	1.2	3.4	3.3
2009	7	5.8	4	4.1	. .	3.8	3.4
2010	6.5	4.9	3.5	4.2	. .	. .	3.5

Source: SIPRI

	Military expenditure by country (% of GDP)						
	Oman	Qatar	Sudan	Syria	Tunisia	UAE	Yemen
1990	16.5	. .	3.5	6.4	2	. .	6.6
1991	14.8	. .	3.6	9.7	2	. .	7
1992	16.2	. .	3.2	8.4	1.9	. .	7.3
1993	15.4	. .	3.6	6.7	1.9	. .	7.1
1994	15.7	. .	2.8	7.2	1.9	. .	8.4
1995	14.6	. .	2.3	6.9	1.9	. .	6.4
1996	12.5	. .	1.3	6	2	. .	5.3
1997	12.5	. .	1	5.9	1.9	6.8	5.8
1998	12.5	. .	2.4	5.8	1.8	8.6	6.1
1999	11.4	. .	4	5.8	1.7	7.7	5.2
2000	10.8	. .	4.5	5.5	1.8	8.3	4.9
2001	12.5	. .	2.5	5.5	1.7	5.6	5.5
2002	12.4	3.9	2.7	5.4	1.7	4.9	6.9
2003	12.2	3.3	1.9	6.2	1.7	4.7	6.9
2004	12.1	2.4	4.7	5.5	1.6	4.6	5.3
2005	11.8	2	3.3	5	1.5	3.7	4.9
2006	11	1.8	3.4	4.4	1.4	3.2	4.3
2007	10.3	2	. .	4.1	1.3	3.3	4.9
2008	7.6	2	. .	3.6	1.3	3.7	4.4
2009	9.3	2	. .	4	1.3	5.1	. .
2010	8.3	1.5	. .	4.1	1.3	5.9	. .

Source: SIPRI

Annex 18 – Spending on Education

	Public spending on education, total (% of GDP)								
	Egypt	Iran	S.Arabia	Turkey		Egypt	Iran	S.Arabia	Turkey
1971	4.7	2.9			1991		4.0	5.8	2.2
1972	4.7	2.9			1992	4.1	3.9	5.2	2.5
1973		3.0			1993	4.2	4.7	6.0	3.4
1974	5.5	2.8			1994	4.6		6.4	3.4
1975	5.0	3.1			1995	4.6	4.4	5.7	2.3
1976	5.0				1996	4.7	3.8	5.0	
1977	4.5	5.8			1997			4.6	
1978	4.9			4.3	1998			8.3	
1979				2.9	1999		4.5	7.1	3.0
1980	4.2				2000		4.4	5.9	2.6
1981		7.5	3.9	2.2	2001		4.4	7.8	2.7
1982	5.3	6.0	4.2	1.8	2002		4.9	7.7	2.8
1983	5.6	4.3	6.0	2.6	2003	4.9	4.8	7.1	3.0
1984		4.0	6.1	2.0	2004	4.7	4.9	6.5	3.1
1985		3.7		1.7	2005	4.8	4.7	5.7	
1986		3.8	6.3	1.5	2006	4.0	5.1	6.2	2.9
1987		4.4		1.2	2007	3.7	5.5	6.4	
1988	4.5	3.9		1.3	2008	3.8	4.8	5.6	
1989	4.6	4.2		1.3	2009		4.7		
1990		4.0		2.1	2010		4.7		

Source: WBp

Annex 19 Health Expenditures

Public Health Expenditure (% of GDP - trendlines)				
	Egypt	Iran	S.Arabia	Turkey
1995	1.8	1.7	1.5	2.4
1996	1.8	1.8	1.6	2.7
1997	1.9	2.0	1.8	3.0
1998	2.0	2.2	1.9	2.6
1999	2.2	1.9	2.8	2.9
2000	2.2	1.9	3.1	3.1
2001	2.3	2.2	3.3	3.5
2002	2.5	2.1	3.1	3.8
2003	2.2	2.3	2.9	3.8
2004	2.0	2.1	2.6	3.8
2005	2.0	2.2	2.6	3.7
2006	2.3	2.4	2.8	4.0
2007	2.0	2.3	2.7	4.1
2008	2.0	2.3	2.1	4.4
2009	2.1	2.3	2.7	5.1
2010	1.9	2.1	2.6	5.0

Source: WBq and WBr