

# The Arab Muslim World on the Threshold of the Millennium

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*The increasing attention given to the relations of the Arab Muslim World with the rest of the world has been demonstrated by the voluminous body of recent commentary, much of it of variable quality. We should consider not only the rate and fluctuations in economic growth, compared with the rest of the world, but also the characteristics of social, political, cultural, technical, scientific and demographic change. Prof. Meliantsev looks at the performance of the region as a whole and of individual countries within it. His conclusions do not make comfortable reading.*

## SUMMARY

Assessments of the pace of economic development in the Arab Muslim World have sometimes been too harsh: they do not take account of trends that are often worldwide. At the same time these assessments may ignore other factors leading to a more pessimistic view of the AMW's prospects.[1]

Decline in growth rates has been a worldwide phenomenon, caused by the instability of international financial markets and the tendency for investment to be short-term and speculative. This slowdown has been masked by the high performance of newly industrialized countries (NICs) and the liberalizing of economies in India and China.

The AMW shared in this downward trend, though there were offsetting developments in those Muslim countries (like Morocco, Tunisia, Turkey, Egypt and Jordan ) that introduced structural economic reforms, so that the share of world GDP taken by the AMW increased between 1980 and 2001.

Over the same period world GDP growth has tended to fluctuate widely around the trend. The AMW has shared in this. But the history of individual countries has not always followed the same pattern. Some countries were close to the world average (for example, Tunisia, Bahrain, Egypt); but others, like Saudi Arabia, have shown much greater fluctuations, and in areas of conflict (Kuwait, Lebanon, Iraq) fluctuations have been several times greater than the norm. These instabilities demonstrate not only a deterioration in the socio-economic and political experience of these countries, but may also be an indicator of conflict, both internal and external.

The AMW's increased share of world GDP has been largely induced by higher than average population growth. The rate of growth of GDP per head (measuring

the Islamic World as a whole) has declined from 2.8% in 1950 to 1980 to 0.9% to 1.0% in 1980 to 2001. But again we stress that this was part of a global change.

The huge increase in oil prices starting in 1973 (followed by the comparative reduction in prices in the 1980s and 1990s) contributed to both the rise in GDP and the fluctuations in growth rates. Oil was also a contributor to the widening gap between the rich and poor in the Arab region. It also masked the fact that the performance of the non-oil industrial sector was no better than that of many of the least developed countries.

There has been an uneven contribution by the Muslim countries to the world economy. In the 1960s to 1980s the contribution of the AMW to world exports more than doubled to 14%. Thereafter it fell to 8.4% in 1990 and 6.3% in 2001. Despite increasing its share of world population, its contribution in terms of GDP and trade is relatively insignificant.

The reasons for this poor competitive performance include slow technological change, inadequate pan-Arab trade integration and the relatively closed nature of the ACs' economies. Despite improvements in some Arab countries, the share of manufactures to overall exports increased only from 3% in 1960 to 8% in 1980 and 23% in 2001. Experience even in other developing countries has been higher. The share of high technology products was around 2% in the ACs compared with 22% in other developing countries.

An examination of the quality of economic growth shows that, with a few exceptions, there has been a fall in the return on investment (and an increase in the coefficient of maximum capital volume) in the last two decades. This has been a worldwide occurrence, in which the ACs have shared. But in their case the contributing factors have been political and economic instability, excessive state interference, high state spending and the brakes put on reform by conservative and authoritarian regimes.

The share of state sector salaries in the GDP is high – double that of developing countries overall. Military spending has grown from around 6% of GDP in 1960 to 12% in the 1980s and 1990s. Bureaucracy, red tape and corruption hinder development of private enterprise. On average, in the ACs, procedures connected with opening a business can take 40 days. In the USA the process takes four days.

In the ACs, bank advances, as a proportion of GDP, grew from 28% in 1960 to 48% in 2001. This is lower than other developing countries (54%) and substantially lower than Asian NICs, China and Western countries (130%). Interference by the state increased the proportion of non-performing advances. The securities market is under-developed. In this respect the ACs lag behind other developing countries by a factor of five to six. As a result, the inflow of foreign direct investment has declined as a proportion of world investment. At the same time there has been an active outflow of Arab capital from the region.

Investment in health care, education and science lags behind the rest of the world.

On the other hand, on some measures loosely associated with the quality of life, the ACs have shown a positive performance. The proportion of the destitute (those with income up to \$1 a day measured in 1993 purchasing power parities) has decreased from 11% to 3% of the population. This improvement is related to the redistribution of oil revenues and government intervention.

Improvements in diet, hygiene and medical services have resulted in a decrease in infant mortality and a rise in the average life expectancy.

Educational achievement, measured by student intake into middle and upper school, has improved markedly, but there is still some way to go. For example, in the upper school intake, the ACs have reached levels comparable with those of Western Europe and Japan at the end of the 1960s. The average number of years in education has increased from 1.6 in 1950 to 6.5 in 2001. Adult literacy is, on average for the ACs together, 61% in 2001; but this is lower than the non-Arab Muslim states (67%) and lower than the average for the developing countries (74%). A particularly acute problem is the gender gap in literacy levels (less than half the female adult population in the ACs can read). Of the total of 70 million illiterates in the ACs, two-thirds are women.

As the population rises, unemployment is becoming a serious problem, associated with the low level of economic diversification, defects in the system of training skilled personnel and the worsening position of the oil market in the 1980s and 1990s. A specific problem is that the acquisition of technical skills may not be high enough or sufficiently up to date to keep pace with the requirements of modern technological development.

All the impeding factors noted above have been responsible for a decline in total factor productivity (see Table 2) on average for the ACs from 2.1% a year in 1960 to 1980 to -0.2% a year in 1981 to 2001. This trend however is one shared with the rest of the world. Some ACs have been able to keep above the average by diversifying the structure of production and export.

Different indicators of performance can be used to show different results compared with other countries and economic blocs. For example, in terms of average per capita GDP, the Arab countries reduced the gap with the USA at a fast rate in the period 1950 to 1980, but this gap widened in the following two decades. The human development index (defined in Table 1) in the AMW has risen faster than tropical Africa and Latin America, but was, in 2001, less than China and the NICs. But in terms of this index the AMW was lower in 2001 than any other grouping except Tropical Africa. According to a combined index of income equality and gender equality (Table 3 sub-index G) the ACs were lower than the AMW, which in turn was substantially lower than the NICs, Russia, China, Japan and the Western Countries. On an indicator of the spread of mobile phones, computers and internet use, the AMW was higher than Tropical Africa and India, but lagged behind other countries. The indicator S (in Table 3) shows the unweighted average of the indices of economic freedoms and quality of state institutions. This shows that the Muslim world overall surpasses Tropical Africa but is otherwise at a very low level. The normal development index (D in Table 3) takes into account per

capita GDP, average life expectancy and the average years of education of the adult population. A broader version of this (U in Table 3), which takes account of all other indices mentioned above, shows most starkly the divergence between the advanced, advancing and backward countries and groups.

## Conclusion

Apart from their contribution to the increase in world population and to exploitation of the world's hydrocarbon reserves, the performance of the Arab countries, and the group of Muslim countries as a whole, compared with the rest of the world, has been unimpressive and it has weakened in the past two decades. The ACs have shared this slowdown with other countries and groups. However the countries with oil export experience have shown manifestations of the 'Dutch disease'; that is, the strong growth of the hydrocarbon sector has masked or inhibited diversification and development of other sources of industrial growth. Political instability has encouraged the establishment of authoritarian regimes.

These have increased military spending, and built up the machinery of repression, but have behaved irresponsibly in their economic and social policies. They have squandered capital resources and have avoided policies that would stimulate a competitive private sector. True, they have taken certain measures directed towards improvement in the quality of life of their people, but state policy in these areas has been insufficient.

Quantitative measures are less important than qualitative. Enormous differences persist in the field of education, the labour market and social and political life. This retards the maturation of a civilized civic society, even though it may be consistent with preserving Islam's traditional values. These are under threat in the modern world, explaining perhaps the growth of fundamentalism.

As a result the Arab countries, and some other Muslim countries, have been slow to adopt full industrialization. They have weakly differentiated production and export structures, undeveloped agriculture, and they are less prepared for the information revolution than many other developing countries. This widening gap with the developed world, in a context of rapid population growth, rising unemployment, the intractability of the Middle East problem and the sharpening competitiveness of the Western countries, feeds the growing frustration among the Arab Muslim world, with far-ranging consequences for us all.

## Conflicting Trends in Economic and Social Development

The dramatic events at the start of the 21st century showed once again with particular clarity that global (not only Middle Eastern, but also Eurasian and American) political and economic stability depends to a significant extent on how the Arab Muslim World (AMW) is going to develop. This can be seen in the increasing intensity of discussions and analytical publications on this subject. The quality of the materials published is of course variable. However, some authoritative articles have begun to appear, which merit attention. The quite harsh assessments of the level of economic development of the AMW contained in reports recently published by a number of leading research centres are in many respects fair, albeit, in my view, also not beyond reproach.[2] In a certain sense, they are at the same time both understated and overstated.[3]

Many experts have not taken full account of the downward trend in the economic activity of other regions and civilizations, nor of the substantial disparities between the Islamic countries, including the Arab Countries (ACs). A more thorough analysis, which includes not only the macroeconomic indicators, but also social and cultural, technological and institutional characteristics, shows the greater extent to which the majority of the countries of the AMW and other peripheral states lag behind the developed countries.

1. The increase in the instability of the foreign exchange and financial basis of the globalizing economy which has taken place in the last two or three decades, and the activation of short-term, predominantly speculative investments at the expense of long-term investments have to a major extent brought about a decrease in the average annual growth rates of world GDP: from 4.5% in 1950 to 3.0% in 1980 to 2001. This includes a decrease from 4.0% to 2.6% in Western Countries and from 7.9% to 2.5% (and below) in Japan, from 5.2% to 2.2% in Latin America and from 4.3% to 1.8% in tropical Africa, from 4.1% to 0.3% in Russia and from 6.3% to 2.2% in the Arab countries (in other Muslim countries, the slowdown was smaller, from 4.7% to 4.1%). A 'compensating' function was exercised by the newly industrialized countries (NICs), in which the rates of GDP growth in the periods in question remained at a record level of 7% to 8% per annum. Furthermore, India and China, having embarked on the path of measured and adequately thought-out liberal reforms, were able to accelerate GDP growth rates respectively from 3.4% to 5.8% and from 4.6% to 7.3%, in spite of the multitude of problems they faced.[4]

Bearing in mind the general declining trend in the majority of developed and developing countries, the growth difficulties of a number of Islamic countries should not be excessively dramatized (although the inability of many of the petroleum exporters among them to absorb the multibillion dollar revenues is astonishing). In 1980 to 2001, the ACs' share of world GDP decreased from 3.4% to 2.9%. However, it decreased in tropical Africa (from 3.3% to 2.6%), in Latin America (from 9.5% to 8.0%), in Russia (from 4.9% to 2.8%), and in Western Countries (from 49.7% to 45.8%). At the same time, a number of Muslim countries, which implemented stabilizing and structural reforms, overall achieved moderate or even relatively high annual rates of GDP growth in 1981 to 2001: 3.4% to 4.6% in

Morocco, Tunisia, Jordan, Turkey and Bangladesh; 4.9% to 5.1% in Egypt, Pakistan and Indonesia and 5.7% to 5.9% in Malaysia.[5] As a result, the AMW's share of global GDP in the last few decades did not decrease, but rather increased – from 6.2% in 1950 and 7.8% in 1980 to 8.3% in 2001.

A characteristic of many Islamic countries is the very high degree of instability in the behaviour of GDP. The average annual variation in GDP growth rates in the AMW almost doubled (from 117% in (1950); 1960 to 1980 to 214% in 1981 to 2002) and in the Arab countries among these it more than tripled, from 96% to up to 314%. We may note that in China and India it decreased three- to fourfold – from 151% and 111% respectively to 29% to 31%. However, the instability of growth also increased in developed countries – on average twofold (from 40% to 50% to 80% to 90%) and in Latin America fivefold (from 50% to 55% to 250% to 260% respectively). It remains at a highly dangerous level in many of the countries of Tropical Africa.

However, as is rightly said, 'the devil is in the detail'. In 1980 to 2002, the average coefficient of annual fluctuation in GDP was 28% in Bangladesh, 36% in Pakistan, 59% in Tunisia and Bahrain, 65% in Egypt, 70% in the Yemen and 77% in Oman; in other words, it was on average not (significantly) higher than in the developed countries and NICs. At the same time, in Saudi Arabia, Turkey, the UAE and Qatar there was an eight- to twelvefold (an order of magnitude) increase in the indicator compared to the years 1960 to 1970, reaching 287%, 472%, 647% and 1,021% respectively in 1981 to 2002. In a number of countries drawn into military conflicts, the fluctuations in GDP growth were truly enormous in 1981 to 2002: 816% in Kuwait, 863% in the Lebanon and no less than 2,500% to 2,800% in Iraq and Somalia. They were much higher than in certain major countries in the East and the South (for which long-term annual GDP statistics exist: India, Indonesia, Brazil and Mexico) at the time of their so-called premodern growth period in the middle and end of the 19th to the mid-20th century. The fluctuation in GDP growth in these countries was on average 260% to 280%.[6] The stated indicators of economic instability in the ACs and the AMW and other similar indicators are indicative not only of the extreme deterioration in their socio-economic and political situation, they can also 'predict' with some degree of probability the escalation of internal and external conflicts in the key countries of the Near and Middle East (and possibly also beyond its boundaries).

The continuation in the Arab Muslim World of almost the highest average annual population growth rates (2.4% in 1980 to 2001, including 2.5% to 2.6% in the ACs) resulted in record growth in the contribution of the AMW to the world population – from 12.5% in 1913 to 19.6% in 2001 (in China it was 20.8%), this being mirrored by a decrease in the contribution of the Western Countries, from 20.8% to 11.7% respectively. At the same time, the average annual per capita GDP growth rates in the Islamic world decreased almost threefold (from 2.8% in 1950 to 1980 to 0.9% to 1.0% in 1980 to 2001) and especially sharply in the ACs, from 3.5% to 3.6% to -0.3% to -0.4% per annum. However, we emphasize, the twofold fall in the indicator in question also took place in the whole world economy (from 2.6% to 1.4% per annum). It could have been larger, but for the successes of the NICs, China and India.

In the 1970s, which were marked by a dramatic take-off in oil prices, the average annual per capita GDP growth rates, adjusted for the change in the external trade balance, in the AMW (4.4%) were overall approximately one third higher, and in the ACs (7.0% per annum) one and a half times higher than the indicator per capita GDP growth. From the mid-1980s and almost until the end of the 1990s, when the market price situation for oil exporters was on the whole unfavourable, the average annual corrected GDP growth rates calculated per head of population in the Islamic world (0.6% to 0.7%) was one and a half times less than the 'normal' indicator of per capita GDP growth (0.9%–1.0%). In the ACs, the rates of decrease in the adjusted indicator (-0.7% to 0.8% per annum) were twice as high as the usual value (-0.3% to 0.4%).<sup>[7]</sup> Compared with the 1970s in the AMW, the real slowdown in average per capita growth rates in the domestic income of the population in the 1980s to 1990s was not 2.4 percentage points (3.4 to 1.0) but 3.8 percentage points (4.4 to 0.6), and correspondingly in the ACs not 5.1 percentage points (4.7 to -0.4) but 7.8 percentage points (7 to -)0.8). These data reinforce the conclusion reached above concerning the extremely high level of reproductive instability in a number of Islamic, and above all Arab, states.

The significant instability in growth in the AMW is associated with anomalously high indicators of between-country income differentiation. The gap between the average per capita income of the richest and the poorest country in the Arab world, which was 62:1 in 1960, reached 112:1 in the 1980s, and then decreased by 2000/2001, but still remains exceptionally high by world standards – 28-fold (UAE/Yemen). It many times exceeds the level of international differentiation in incomes in the EU and OECD.

In the years 1960 to 1980 to 2001, on average one half of the economic growth in the ACs was due to growth in the industrial sector. However, the contribution of manufacturing industry to GDP growth in the ACs scarcely reached one tenth, which is characteristic of the least developed countries in the world. Whereas for the group of developed countries and also for developing countries in the 1960s to 1990s, the linear paired correlation coefficient between the growth in production in the manufacturing industry and GDP reached 0.75 and 0.68 respectively, in the Arab world, where the primary sector developed, to some extent, at the expense of manufacturing industry, the said indicator decreased, from 0.45 in the 1960s to 1970s to 0.34 in the 1980s to 1990s.

The integration of the Muslim countries into the world economy is taking place extremely unevenly. Whereas in the 1960s to 1980s the contribution of the AMW to world exports more than doubled, from 6% to 14% (including the ACs, from 4.3% to 10.4%),<sup>[8]</sup> after the period of relatively high prices for hydrocarbons, this contribution, in spite of the growth in the export of finished products in a number of Arab countries, and also in Indonesia, Malaysia, Bangladesh and Turkey, fell to 8.4% in 1990 and 6.3% in 2001 (including the ACs, to 3.8% and 3.5% respectively). Although the contribution of the AMW to world population numbers by 2001 (19.6%) was already two thirds greater than that of the Western Countries (11.7%), the relative significance of the AMW in world GDP (8.3%) and exports (6.3%) was many times less than the corresponding indicators for Western Countries (45.8% and 70%), which is indicative of the comparatively low interna-

tional competitiveness of the economic systems of the majority of Islamic countries, and of their weak and on the whole decreasing involvement in world economic exchanges at a time when globalization is intensifying.

The ineffectiveness of the ACs' export model relates to the comparatively slow changes in the technological and other structures of their exports, the low level of regional (pan-Arab) trade integration, (not more than 4% to 8% of their total external trade turnover relates to inter-Arab trading),[9] and the relatively closed nature of the ACs' economies. In particular, the import tariffs in the countries of the Arab world in 1991 to 2001 were on average 1 1/2–2 and 3–5 times higher than in other developing and developed countries respectively.[10]

In spite of successes in upgrading the export structure in Tunisia, Morocco, Lebanon, Jordan and Bahrain, overall in the Arab world the contribution of manufactured products to their exports increased only from 2% to 3% in 1960 to 6% to 8% in 1980 and 22% to 23% in 2001 (in the developed countries, respectively from 66% in 1960 to 73% in 1980 and 82% in 2001, and in the developing countries from 13% to 15% to 42% to 44% and 63% to 65%). The contribution of high technology products to the value of exported finished products in 2001 in the ACs overall (2% to 3%) was almost an order of magnitude lower than in other developing countries (18% to 22%).[11]

2. Moving on to the problems of accumulation and effectiveness of economic growth, we note that, with the exception of India and China, in the majority of other countries in the world there has been a fall in the return on investment and an increase in the coefficient of maximum capital volume in the last two decades. The coefficient grew 1.2–1.3 times (from 5.3 to 6.5 and from 3.2 to 4.1 respectively in 1950 to 1980 and 1981 to 2001) in the USA and NICs (weighted average estimate for South Korea and Taiwan), 1.4–1.5 times on average (that is, from 5.8 to 8.5 and from 3.8 to 5.6 respectively) in Western Countries and also in the group of non-Arab Muslim countries, and 2.5 fold (from 3.8 in 1950 to 1980 to 9.5 in 1981 to 2001) in the countries of Latin America. However, it grew still more, 2.6–2.7 times, in the ACs and the countries of Tropical Africa (from 4 to 10.7 and 10.6 respectively) and also in Japan (from 4.3 to 11.6). Thus, the repeated fall in the effectiveness of capital investments in the ACs and the more moderate fall on average in the group of other Muslim states is not a unique phenomenon in modern economic history.

Causes of the low return and far from optimal structure of capital investment in the Arab world must include the growing political and economic instability in the region, the excessive interference of the state in the economy and the slowing of the process of reform by conservative and authoritarian regimes. The average contribution of total state expenditures to GDP in the Arab region (35 to 40% of GDP in the 1970s to 1990s) was one and a half times greater than in the remainder of the developing world overall. Meanwhile the correlation coefficient ( $r$ ) between the rate of economic growth in 1981 to 2001 and the contribution of current state expenditures to the GDP of the developing countries was -0.79.[12] In other words, under conditions where there is a low level of development, an increase in State expenditures above certain limits becomes counterproductive.



In the countries of the Near and Middle East, the indicator magnitude of salaries paid in the state sector in relation to GDP is anomalously high (10% to 11% of GDP; it is double that in developing countries overall).[13] The countries in the region are characterized by enormous military expenditures. In the ACs, they grew from 5% to 6% of GDP in 1960 to 8% to 12% in the 1980s to 1990s. This indicator is on average 3 to 4 times higher than in other peripheral countries.[14] As a result, although it did grow on average from 1.3:1 to 1.4:1 in the 1960s to 1970s to 1.5:1 to 2:1 in the 1980s to 1990s, the ratio of private to state investments still remains low in the ACs and also overall in the AMW group, at the level of the countries of Tropical Africa, while in developed countries and in the East Asian NICs this indicator has a value of 4:1 to 5:1.[15]

In the Near East countries, bureaucracy, red tape and, of course, corruption seriously complicate the development of private enterprise. At the start of 2002, the procedures connected with the opening of a business in the ACs took on average 40 days, that is, ten times longer than, for example, in the USA (four days).[16]

Characterizing the state of the finance sector, we note that an indicator such as the sum of the credits issued by the banks to the private sector, in relation to GDP, grew overall in the ACs from 26% to 28% in 1980 to 40% to 42% in 1990 and 46% to 48% in 2001. However, it is lower than the average in developing countries (52% to 54%) and substantially lower than in the Asian NICs, China and Western Countries (120% to 130%), and also in Japan (186% to 188%). In the majority of the ACs, there remain inefficient, non-transparent banking systems strongly controlled by the state. According to far from complete assessments, the proportion of non-performing credits to the total volume in the ACs reaches 10% to 20%.[17] The securities market in the Arab states is (even) less developed. In these, the market capitalization volume (as a percentage of GDP) grew only from 24% to 26% to 28% to 30% in 1990 to 2001, and it is on average lower than in the whole group of developing countries (32% to 34% of GDP). In terms of the indicator contribution of shares traded to GDP, the ACs (4% to 5% in 2001) lag behind other developing countries (26% to 27%) by a factor of five to six, and behind developed countries (163% to 167%) by several multiples of ten.[18].

For the reasons noted above, the contribution of the ACs in world indicators of the pure inflow of foreign direct investments (FDI) decreased from 2.6% in 1975 to 1980 to 1.2% in 1985 to 1995, 0.9% in 1996 and 0.4% in 2000. At the same time, there was an active outflow of Arab capital from the countries in the region. At the start of the 2000s, the total volume of Arab capital invested in OECD countries was estimated at approximately 1.3 trillion dollars.[19]

Although compared to the 1960s to 1970s, the ACs contribution to GDP of combined private and state expenditures on the development of health care, education and science increased approximately one and a half times, by the 2000s it only just exceeded 11% to 12%: expenditures on health care were 4.3% to 4.5%, on education, including professional training 6.5% to 6.9%, and on R & D approximately 0.4% [20] of their GDP. This indicates that the ACs are seriously failing to prepare for the challenges of the post-industrial era.

3. In spite of the considerable slowdown in economic activity in the ACs in the last two decades, overall they have managed to achieve certain successes in improving the quality of life. In 1970 to 1998 to 2000 in the ACs, the percentage of destitute (criterion up to 1 dollar per day, on the basis of 1993 purchasing power parity (PPP)) decreased on average from 10% to 11% to 3%, and of the poor (up to 2 dollars per day) from 37% to 39% to 28% to 30%. By 2000, these indicators for the ACs were lower than in Latin America (12% and 32% respectively), in Eastern Asia, excluding Japan (15% and 49%), in Southern Asia (40% and 84%) and in Tropical Africa (48% and 78%). The fact that acute forms of poverty are relatively less widespread in the Arab world is connected with the redistribution of oil revenues, the provision of a range of subsidies to the population by the state, with the relatively low 'internal' level of inequality of distribution of incomes, and the spread of the Muslim standards of zakayat (payment of 2.5% of monetary income for the benefit of the poor) and sadak (mutual assistance).[21]

Improvements in diet, hygiene and medical services have resulted in a decrease in the infant mortality rate: on average from 153 to 157 per mille in the ACs in 1960 to 90 to 94 in 1980 and 45 to 49 (up to 53 to 57 in the AMW) per mille in 2001. The result achieved varied greatly between countries, but overall corresponded to the indicators for the West and Japan half a century ago. The average life expectancy indicator increased at very significant, albeit not record, rates in the Arab world: on average from 44 to 46 years in 1960 to 56 to 58 in 1980 and 66 to 67 years in 2001.[22]

Considerable success has also been achieved in the AMW in the field of education (although much remains to be done). Thus, for example, the gross indicator of student uptake into middle school education in the ACs grew from 10% to 11% in 1960 to 35% to 37% in 1980 and 57% to 58% in 2000. In the group of non-Arab Muslim states it increased, less substantially, from 8% to 9% to 24% to 25% and 46% to 47% respectively. However, by 2000, the average indicator for the ACs was no higher (and for the AMW lower) than overall in the developing countries, and was at the level of the Western Countries and Japan at the end of the 1940s to the start of the 1950s. From an exceptionally low starting position, in terms of the indicator of student uptake into upper school education in recent decades (1% to 2% in 1960, 9% to 10% in 1990 and 19% to 20% in 2000),[23] the ACs overall even exceeded the 'benchmark' for the developing countries (2% to 3%, 8% and 14% respectively). In terms of the indicator in question, the ACs overall have reached the positions of Western Europe and Japan at the end of the 1960s and have reached the level of the USA half a century ago.[24]

A number of defects which substantially decrease its effectiveness are characteristic of the educational system of the AMW. In the ACs in 2000, not more than two thirds to four fifths of all primary school teachers were regarded as trained. In the 1990s, on average less than one third of all students were studying in the natural science and medical faculties of the universities (40% to 45% in the Asiatic NICs)[25]

In the ACs, the average indicator of adult population literacy increased many times, from 16% to 17% in 1960 to 39% to 41% in 1980 and 59% to 61% in 2001.

However, its values were lower than in the group of non-Arab Muslim states (respectively 25% to 27%, 42% to 44% and 66% to 67%) and overall in the developing countries (13% to 15% in 1900, 27% to 29% in 1950, 37% to 39% in 1960, 55% to 57% in 1980 and 72% to 74% in 2001).[26] A particularly acute problem for the Arab-Muslim world is the gender gap in literacy levels. In spite of the fact that in 1970 to 2001 the literacy rate for women in the ACs grew threefold (from 16% to 49%), more than half of all adult women cannot read and write. The indicator ratio of female to male literacy in the Arab world increased by three quarters in these years, from 36% to 64% to 65%. However, in terms of this indicator the ACs lag behind India (67%), the group of non-Arab Muslim countries (74% to 75%), Tropical Africa (76% to 78%), China (85%), Latin America and the Asian NICs (97% to 98%). Of the total of 70 million illiterates in the ACs, two thirds are women.[27]

The low diversification of economic structures in the ACs, rapid population growth, an increase in the female workforce (by 2% to 4% to 6% per annum in the 1990s), lack of training for skilled personnel, and the decline in business conditions in the oil market in the 1980s to 1990s caused a substantial increase in the level of unemployment. The average in the Arab world was from 8% to 10% in the late 1970s to early 1980s, 12% to 13% in 1990 and approximately 15% in 1998 to 2000.[28]

The average number of years of education of the adult population (adjusted downwards for quality) overall in the Arab world grew rapidly, admittedly from a very low base: from 1.6 in 1950 to 4.0 in 1980 and 6.5 in 2001 (see Table 1). In 1976, unqualified and low-qualified workers made up approximately 87% of the gainfully employed population of the Arab world, those with intermediate qualifications 8% and the highly qualified 5%.[29] Had much changed a quarter of a century later? According to our calculations, the percentage of the first group decreased to 70%, still constituting the overwhelming majority. The contribution of workers with an intermediate qualification increased two and a half times, to 19%, and that of those with a higher qualification doubled, to approximately 11%.[30] But will these be sufficient either for the effective implementation of an as yet incomplete industrialization or to deal with the challenges of the post-industrial era? In the developed countries, highly qualified professionals make up not less than half the working population. But even this is considered insufficient. Knowledge and skills become obsolete. The accumulated human capital, unfortunately, loses its value quite quickly (we simply try not to notice this). Hence the ACs, if they are aiming to at least remain 'afloat', will have to carry out more than one series of rational, logical reforms in order to activate their human potential.

The factors presented above were to a major extent responsible for the sharp fall in the rates of growth of the total factor productivity (TFP) in the ACs, on average from 2.1% in 1960 to 1980 to -0.2% in 1981 to 2001 (see Table 2). We emphasize however that, apart from the Asian NICs, and also China and India where this indicator increased (from 2.0% to 3.5%, from 0.1% to 2.7% and from 0.7% to 2.4% respectively in the periods in question), in the majority of other countries of the world the situation deteriorated. The rate of growth in TFP decreased overall in the AMW from 1.8% to 0.3%, in Tropical Africa from 1.2% to -0.3%, in Latin

America from 1.1% to -0.4%, in Western Countries from 2.4% to 1.1% (including the USA: from 1.7% to 0.8%) and in Japan more than threefold: from 4.9% to 1.4%.

In the ACs which have been able to diversify the structure of production and export – Egypt, Tunisia and Morocco – according to our calculations the average annual growth rates in TFP in 1981 to 2001 amounted to 1.0% to 1.3% on average, in Turkey 1.2% to 1.3%, in Pakistan 1.3% to 1.4% and in Malaysia 2.2% to 2.3%. For many Islamic countries to increase their efficiency and international competitiveness, the following factors will be essential: a substantial increase in the quality of labour and capital resources, the assurance of greater openness in the economy and the formation of new market institutions, and the attainment of a greater degree of political stability.

4. The overall evaluation of success to a large extent depends on the selection of the key indicators. In terms of the criterion of average per capita GDP, the Arab countries overall closed the gap with the USA almost one and a half times (from 14.8% to 21.8%) in 1950 to 1980, and then fell back sharply, to 13.3% in 2001. Admittedly in the last 20 years, with the exception of the NICs, China and India, a substantial increase in the size of the lag behind the world economy leader in terms of this indicator was also seen in Latin America, Tropical Africa, Russia and a number of other countries.

Over the last half-century, the human development index (HDI, see Table 1) has risen 2.6 to 2.8 times in the Arab countries and the AMW overall, that is, more than in Tropical Africa and Latin America (1.9 and 2.3 times respectively), but significantly less than in India (3.1 times), China (4.0 times) and the NICs (4.9 times). On average in the Arab and other Muslim countries, the HDI increased from one fifth of the level in the USA in 1950 to one third (one quarter) in 2001. In terms of this indicator, however, the AMW occupies one of the lowest positions in the world rankings table, only surpassing Tropical Africa.

5. The relative development level attained in the AMW should preferably be adjusted to take account of other important indices, reflecting the main characteristics of contemporary production capacities and also the institutional factors conducive to the development of freedom, and the reinforcement of human rights and personal property rights. According to our calculations, in 2001 the combined indicator of general and gender equality (subindex G in Table 3) in the ACs (75% of that in USA) was lower than on average in the AMW (80%), India, Latin America and Tropical Africa (76% to 78% to 82%), and significantly lower than in the NICs and Russia (88%), and also China and Japan (95% to 97%) and the Western Countries (103%).

In terms of the indicator spread of mobile telephones, computers and internet use (calculated per 1,000 inhabitants, as a percentage of the USA level), the AMW (4.4% to 4.9%) overall in 2001 surpassed Tropical Africa (1.1%) and India (0.6%), but lagged behind China and Russia (7% to 8%), and Latin America (15%). The lag of the Arab and other developing countries behind the 'golden billion' in terms of this technological criterion many times exceeds their lag in terms of the indicator

product per capita. In 2001 to 2002, about 5% of the total world population lived in the Arab countries, but less than 1% of all internet users, whereas in the Western Countries, having a little over one tenth of the Earth's total population, two thirds of the world internet audience is concentrated.[31]

The indicator S, shown in Table 3, is the unweighted average of the indices of development of economic freedoms and quality of state institutions. The first, consisting of 10 subindices, includes components such as freedom of trade, level of tax burden, deregulation of financial sector activity, free pricing, absence of a black market and the like.[32] The second index, calculated as the arithmetic mean of six components, includes indicators of political stability, the rule of law, efficiency of the state, quality of government, control of corruption and accountability of the state to the public (the primary data of D. Kaufmann, A. Kraay and M. Mastruzzi were first normalized, taking the USA level as 100).[33]

Analysis of the data in Table 3 shows that in terms of the general level of development of institutions the Muslim world overall (S = 21% of the USA level), including the Arab countries (26%), appreciably surpasses Tropical Africa (16%), mostly represented by the least developed countries, but overall is at a very low level. (Regrettably, for the time being Russia falls within this cluster of countries, at 28% of the USA level). China (35%), India (40%) and Latin America (47%) represent a so-called intermediate group. At the same time, the Asian NICs (South Korea and Taiwan, 74%) are manifestly gravitating towards the more developed countries, towards Japan (84%) and the Western Countries (98% of the USA level).

The addition to the normal development index (NDI) of three components reflecting the level of general and gender equality, the degree of dissemination of the latest IT, and also the progress in providing economic freedoms and the quality of the state institutions to no little extent corrects the NDI (see Table 3). The level of development (relative to the USA) overall decreases from 29% to 24% for the Islamic countries, from 33% to 27% for the Arab countries, from 19% to 15% for the countries of Tropical Africa, from 44% to 41% for Latin America, from 36% to 32% for China and from 28% to 18% for India (-10 percentage points). However, the relative level of development in Russia decreased most of all, from 51% to 37%, that is, by 14 percentage points.

The transformation of the normal development index into a broadened index still more clearly demarcated the advanced and backward countries. It revealed the 'hidden' dynamic of more developed states. The greatest rise in 'level' was found in the Asian NICs, in which the relative level rose from 74% to 79% of the USA level. In Japan, it 'grew' from 85% to 87%, and overall in Western Countries from 91% to 94%.

## Conclusion

In summary, we emphasize that the Arab Muslim world is indeed experiencing substantial difficulties. In the 1980s to 1990s under the circumstances of a relative

decline in the external balance of trade, GDP growth slowed in a number of AMW countries, a decrease in per capita income levels took place and a substantial fall in the effectiveness of capital investments and total factor productivity was seen. Apart from the increasing contribution to world population numbers, and also the continuing significant proportion of total reserves and export of hydrocarbon raw material, the international positions of the Arab countries, and also of the group of Muslim countries as a whole (in the global volume of GDP, exports, market capitalization, influx of foreign direct investment, in aggregate expenditures on the development of the human factor and R & D, in the application of information technology, in the level of education of the population and the quality of public and state institutions) are very unimpressive or have even weakened in the last two decades.[34] We recall, however that, with the exclusion of China, India and the NICs, the declining tendency in GDP growth, sharp fall in effectiveness of capital investments and factor productivity were, albeit to varying degrees, characteristic of Tropical Africa, Latin America, the former Soviet bloc and also the Western countries and Japan. As far as we know, 'simple' explanations for this practically global phenomenon have not so far been found.

The problems of the Arab countries and a number of other Muslim countries are, of course, to a considerable extent connected with the so-called 'Dutch' disease. Our own experience of the 1970s to 1990s, showed that, in the absence of a well-established institutional mechanism, natural gas revenues (in actual fact, unearned income) retarded the implementation of pressing reforms and created a situation for revenue-seeking, but not profit-oriented macro- and micro-economic behaviour among a significant part of the population, both rich and poor.

Under the conditions of heightened external and internal political instability characteristic of the Near East, authoritarian regimes arose in many of these countries and have persisted for several decades. In terms of the level of development of political and civil freedoms, by the start of the third millennium the ACs and a number of other Muslim states overall lagged behind other developing countries approximately by a factor of three.[35] These regimes spent enormous resources on military expenditures and building up the machinery of repression, but for the most part they are very irresponsible in their economic and social policy.[36]

They mindlessly squander enormous capital resources, devoting too little attention to the creation of normal, stimulating conditions for the 'cultivation' of a competitive private sector. Although the authoritarian and conservative regimes constituting the majority in the Arab world are taking certain measures directed towards the development of the quality of life, state policy in this sphere is in fact insufficiently rational, consistent or effective.

Just as a decade ago, quantitative aspects in the field of specialist training are prevailing over qualitative. Enormous gender differences persist in the field of education, in the labour market and in social and political life. This of course retards the maturation of a civilized, civic society, although it perhaps preserves a certain wholeness of the semi-traditional Muslim umma, which is (even now) not prepared for the challenges of modern times[37] and for this reason is striving to find

support in its fundamental principles (hence, possibly, the rather wide dissemination of Islamic fundamentalism).

As a result, the Arab countries and some other Muslim countries (with the exception of Malaysia, Turkey and, possibly, Indonesia) have come to be incompletely industrialized, with a weakly differentiated production and export structure and undeveloped agriculture, and are, in point of fact, worse prepared for the technological revolution than many other countries in the developing world. Against a background of rapid rates of demographic growth, a sharp rise in the scale and extent of unemployment, the intractability of the Middle East problem and the Western Countries racing to open up a new technology 'gap', a feeling of frustration, fraught with far-ranging consequences, is arising in many countries of the Arab-Muslim world.

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[1] In this article references are made to Arab Countries (ACs), to the Arab Muslim World (AMW), to the Islamic Countries (ICs), to Non-Arab Islamic Countries (NAICs), and to newly industrialized countries (NICs).

[2] See: UNDP, (2002–2003) *The Arab Human Development Report, 2002; 2003*, New York, UNDP (publisher?); World Economic Forum, (2003) *The Arab World Competitiveness Report, 2002-2003*, New York, Oxford University Press; Harkura, D., and Sutton, B. (September 2003) 'How Can Economic Growth in the Middle East and North Africa Region Be Accelerated?' IMF World Economic Outlook, Washington, D.C., IMF (Publisher?), Ch. II.

[3] See: Melyantsev, V.A. (2003) *The Arab Muslim World in the context of global economics*, Moscow, ISAA Publishing Centre at Moscow State University.

[4] These and a number of other estimates are based on the extensive statistical economic databases established and verified by experts of the WB, IMF, UNCTAD, WTO and the prominent statistical economists A. Maddison and B. Bolotin (Maddison, A. (2001) *The World Economy. A Millennial Perspective*, Paris, OECD; Bolotin, B.M. (2003) 'The World Economy in Figures' in I.S. Korolyev, ed. *The World Economy: global trends over 100 years*, Moscow, pp. 493–603.).

[5] Some of the countries mentioned are in the group of second- and third- ranking NICs.

[6] Based on: Maddison, A. (2001) *The World Economy. A Millennial Perspective*, Paris, OECD, pp. 284, 298–302, 317–320; IMF. (April 2003) *World Economic Outlook*. Washington, D.C., IMF, pp. 172, 177–180; (1990) *The major developing countries in the socio-economic structures of the modern world*, Moscow, pp. 405–409; Melyantsev, V.A. (1984) *The economic growth of the Maghreb countries*, Moscow, p. 20; idem, (1966) *East and West in the second millennium: economy, history and modern times*, Moscow, pp. 239, 260, 263–8.

[7] Based on: World Bank, (1988) *World Development Report, 1983*, World Bank, pp. 157–8, 164–5, 184–5; World Bank (2003) *World Development Indicators, 2003*, World Bank, pp. 38–40, 202–204; UNDP, (2001) *Human Development Report, 2001*, UNDP, pp. 186–189; UNDP, (2003) *Human Development Report, 2003*, UNDP, pp. 198–200; UNCTAD, (2002), *Handbook of Statistics, 2002*, Geneva, UNCTAD, pp. 374–95.

[8] Based on: World Bank (2003) *World Economic Outlook*, April, 2003, World Bank, pp. 161–2; World Bank. *World Tables, 1980, 1994; World Development Indicators, 1997-2003; UNCTAD. Handbook of Statistics, 1991, 2002*. New York.

[9] Intra-regional trade accounts for 60% of trade turnover in the EC, 55% in the North American countries and 23% in Southeast Asia. See: World Economic Forum. *The Arab World Competitiveness Report, 2002-2003*, World Economic Forum, p.124; Martens, A. (1983) *L'Economie des pays arabes*, Paris, p. 176.

- [10] Based on: World Bank, World Development Indicators, 2003. pp. 326–328.
- [11] Compiled and based on: World Development Report, 1983. pp. 186-187; UNCTAD (2002) Handbook of Statistics, pp. 137–140; UNDP. Human Development Report, 2003. New York, 2003. pp.287-289.
- [12] Based on: World Development Indicators, 2003.
- [13] World Economic Forum. The Arab World Competitiveness Report, 2002-2003. p.64; Benett, A. Failed Legacies, - Finance and Development, vol.40, 2003, No.1.
- [14] Based on: Human Development Report, 1994. pp.170-171, 211; World Development Indicators, 1998. pp.278-280; 2003. pp.286-288; Rich and Poor States in the Middle East. Boulder, 1982. p.418.
- [15] Based on: World Development Indicators, 1999. pp.270-272; World Development Report, 2000/2001. pp.384-385; World Economic Forum. The Arab World Competitive-ness Report, 2002-2003. p.27; Sayigh, Y.A. The Arab Economy. Past Performance and Future Prospects. Oxford, 1982. p.78, 173; Benett, A. Failed Legacy. – Finance and Development, vol.40, 2003, No. 1.
- [16] World Development Indicators, 2003. pp.266-268.
- [17] Based on: World Development Indicators, 1998. pp.256-258; 2003. pp.258-260; Creane, S., Goyal, R., Mobarak, M., Sab, R., Banking on Development. - Finance and Development, vol.40, 2003, No.1.
- [18] In the Gulf ACs and Jordan, this indicator was higher: 10-12% of their GDP (Based on: World Economic Forum. The Arab World Competitiveness Report, 2002-2003. p.28; World Development Indicators, 2003. pp.270-272).
- [19] The Arab World Competitiveness Report, 2002-2003. P.103, 108-109; The Arab Human Development Report, 2003. Building a Knowledge Society. New York, UNDP, RBAS, 2003. pp.102-103.
- [20] This is lower by a factor of two than on average in the developing countries (Self-doomed to failure. – Economist, July 4th, 2002).
- [21] UNDP. The Arab Human Development Report, 2002. pp.5, 90-91; World Economic Forum. The Arab World Competitiveness Report, 2002-2003. p.65; World Development Indicators, 2003. pp.58-60; Eken, S., Robalino, D., Schieber, G. Living Better. – Finance and Development, vol.40, 2003, No. 1.
- [22] World Development Indicators, 2003. P.112-114; Human Development Report, 2003. pp.238-240, 262-265; Meliantsev V.A. East and West in the second millennium: economy, history and modern times. Moscow, 1996, p.183.
- [23] In the group of other Muslim countries, the results were more modest (1%, 3-4 and 10%).
- [24] See: Human Development Report, 1994. pp.136-137, 207; 2003. pp.237-240, 339; World Development Report, 1983. pp.196-197; UNCTAD. Handbook of Statistics, 2002. pp.356-362.
- [25] World Development Indicators, 2003. P.76-78; The Arab Human Development Report, 2002. P.155.
- [26] See: Human Development Report, 1994. p.27, 136-137; 2003. p.270-274, 339; Stoklitsky S.L., Freedman L.A., Andrukovich P.F. The economic structures of Arab countries. Moscow, 1985, p.154.; Meliantsev V.A. East and West. p.199.
- [27] See: UNCTAD. Handbook of Statistics, 2002. p.356-362; Human Development Report, 2003. p.318-321; The Arab World Competitiveness Report, 2002-2003. p.44.
- [28] See: UNDP. The Arab Human Development Report, 2002. P.158; Gardner, E. Wanted: More Jobs. – Finance and Development, vol.40, 2003, N 1. Eken, S., Robotino, D., Schieber, G. Living Better. – Finance and Development, vol.40, 2003, No.1.
- [29] See: Amin, S. L'économie arabe contemporaine. Paris., 1980. Table 14.
- [30] Based on the sources for table 1, and also: Human Development Report, 2001. p.52-55.
- [31] Based on: World Development Indicators, 2003. pp.298-300; The Arab World Competitiveness



Report, 2002-2003. pp.180-181.

[32] See: The Heritage Foundation. 2003 Index of Economic Freedom. Washington, D.C., 2003. pp.21-25.

[33] See: Kaufmann, D., Kraay, A., Mastruzzi, M., 2003, Governance Matters III: Governance Indicators for 1996-2002. Washington. pp.98-115

(<http://www.worldbank.org/wbi/governance/publs/govmatters.html>.)

[34] See also: Makdisi, S., Fattah, Z., Limam, I. Determinants of Growth in the MENA Countries. Wps0301. Arab Planning Institute-Kuwait, 2003 (<http://www.arab-api.org>); Economic Research Forum (ERF) for the Arab Countries, Iran and Turkey. Economic Trends in the MENA Region, 2002. Cairo, 2002. (<http://www.erf.org.eg>.)

[35] Based on: Freedom House. Freedom in the World. Country Ratings, 1972-73 to 2001-2002. New York, 2002. [www.freedomhouse.org](http://www.freedomhouse.org).

[36] See: Pollock, R.L. Heritage. – Finance and Development. Vol.40, 2003, No.1; Abed, G.T. Unfulfilled Promise. – Finance and Development. Vol.40, 2003, No.1.

[37] See: The Arab Human Development Report, 2003. Building a Knowledge Society. New York, UNDP, RBAS, 2003. pp.1.

**VARIATION IN (NORMAL) DEVELOPMENT INDEX FROM 1913 TO 2001**

**Table 1**

Country, region	1913				1950				1980				2001			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
Arab countries	1120	28	0,8	8	1730	37	1,6	12	4930	57	4,0	28	4560	67	6,5	33
Arab Musl. wrld	956	27	0,6	7	1108	35	1,8	11	2560	55	4,3	22	3130	62	6,8	29
Tropical Africa	913	25	0,4	6	1330	32	1,1	10	2120	48	3,3	18	1750	46	4,9	19
Lat. America	1784	32	1,5	12	3016	47	2,5	19	6390	65	6,0	36	6900	71	9,5	44
India	857	26	0,6	6	788	35	1,4	9	1127	54	4,0	17	2450	63	7,3	28
China	732	30	1,2	8	582	35	1,7	9	1268	67	4,8	20	4260	70	8,3	36
NICs	1038	35	1,4	10	986	49	3,5	15	5160	68	8,5	38	18390	75	15,5	74
Japan	1699	51	5,4	21	2360	63	9,1	29	16500	76	13,1	68	25500	81	16,1	85
The West	4970	50	7,7	33	7830	68	10,3	47	18940	64	13,9	72	28440	78	17,8	91
USA	6590	50	8,3	37	11680	68	11,3	55	22623	74	15,8	79	34280	78	19,9	100
Russia	1460	34	1,6	11	3440	55	5,4	27	8500	67	10,0	47	8660	66	12,0	51

Based on:

World Economic Forum. The Arab World Competitiveness Report, 2002-2003. New York, Oxford University Press, 2003. pp.5-6, 37; Maddison, A. The World Economy. A Millennial Perspective. Paris, OECD, 2001. pp.261, 298, 304, 316-326; World Bank. World Development Report, 2003. Washington, D.C., 2002. pp.234-235,243; World Bank. World Development Indicators, 2003. Washington, D.C., 2003. pp.14-16, 188; IMF. World Economic Outlook. Washington, D.C., April 2003. pp.171-172,177-179; UNDP. Human Development Report, 1991-2003. New York; Melyantsev, V. 'Three Centuries of Russia's Endeavors to Surpass the East and to Catch Up with the West: Trends, Factors, and Consequences' – available at <http://casnov1.cas.muohio.edu/havighurstcenter/papers/THREE%20>, Table A.4.

ECONOMIC GROWTH RATES AND FACTORS,%<sup>1</sup>

Table 2

Country, region	Years	Average annual growth rates				Proportion of intensive factors
		GDP	Workforce <sup>2</sup>	Fixed capital	Combined output	
Arab countries	1960–1980	6,9	2,5	9,0	2,1	30
	1981–2001	2,1	2,9	1,3	-0,2	-10
Arab-Muslim world	1960–1980	6,2	2,3	8,3	1,8	29
	1981–2001	3,3	2,7	3,6	0,3	9
Tropical Africa	1960–1980	4,2	2,2	4,5	1,2	29
	1981–2001	1,8	2,4	1,6	-0,3	-17
Latin America	1950–1980	5,2	2,7	6,8	1,1	21
	1981–2001	2,2	2,4	2,9	-0,4	-18
India	1957–1980	3,7	1,7	5,3	0,7	19
	1981–2001	5,8	2,0	6,1	2,4	41
China	1952–1978	4,4	2,6	6,8	0,1	2
	1979–2001	7,4	2,5	8,0	2,7	36
NICs	1960–1980	8,8	4,0	10,9	2,0	23
	1981–2001	7,3	1,9	7,3	3,5	48
Japan	1950–1973	9,2	1,6	9,2	4,9	53
	1974–2001	2,9	0,1	4,9	1,4	48
The West	1950–1973	4,3	0,6	4,3	2,4	56
	1974–2001	2,5	0,5	3,6	1,1	44
of which: USA	1950–1973	3,6	1,2	3,2	1,7	47
	1974–2001	2,8	1,2	3,8	0,8	29
Russia	1950–1970	5,0	1,5	8,0	0,9	18
	1971–1980	2,4	1,3	6,0	-0,8	-33
	1981–1990	1,5	0,5	3,8	-0,3	-20
	1991–1998	-3,2	-2,6	-4,4	0,1	-3
	1999–2001	5,8	3,1	6,1	1,5	26

Notes:

1. Calculations based on the formula:  $y = \alpha k + (1-\alpha)l + r$ ;  $u = r/y$ , %, where  $y$ ,  $k$ ,  $l$ ,  $r$  are respectively the average annual GDP growth rates, fixed capital, workforce employed and combined output, and  $u$  is the contribution of intensive factors. According to calculations by specialists and our estimates, the average indicators for the elasticity of variation in GDP with workforce and fixed capital were 0.65 and 0.35 in 1950 to 1973, and 0.7 and 0.3 in 1974 to 2001 in the Western Countries and Japan, 0.6 and 0.4 in 1960 to 1980 and 0.65 and 0.35 in 1981 to -2001 respectively in the NICs (South Korean and Taiwan), 0.65 and 0.35 (for both periods) in the Arab countries, overall in the Arab Muslim World, and also Tropical Africa, Latin America and India, and 0.6 and 0.4 (both periods) in China and Russia.

2. For the developed countries, Latin American states, NICs and Russia, the indicators reflect the variations in time worked.

Compiled and calculated on the basis of the data and sources for Table 1, and also: IMF World Economic Outlook. 2003, April. p.14-16, 171-179, 234-236; Russian Federation. Statistical Appendix. IMF Country Report No.03/145. Washington, D.C., May 2003. p.10; Surinov A.E. The standard of living of the population of Russia, 1992-2002. Moscow, 2003. p.71; Melyantsev V.A. 'The East Asian model' of economic growth: the most important components, merits and defects. Moscow, 1998, pp.49-51.

Country, region	A	B	C	D <sup>1</sup>	E <sup>2</sup>	F <sup>3</sup>	G <sup>4</sup>	I <sup>5</sup>	S <sup>6</sup>	U <sup>7</sup>
Arab countries	4560	67	6,5	33	105	53	75	4,9	33	33
Arab-Muslim world	3130	62	6,8	29	109	58	80	4,4	21	24
Tropical Africa	1750	46	4,9	19	85	79	82	1,1	16	15
Latin America	6900	71	9,5	44	78	78	78	15	47	41
India	2450	63	7,3	28	105	55	76	0,6	40	18
China	4260	70	8,3	36	101	89	95	7,0	35	32
NICs	18390	75	15,5	74	116	66	88	92	74	79
Japan	25500	81	16,1	85	127	74	97	86	84	87
The West	28440	78	17,8	91	106	100	103	91	98	94
USA	34280	78	19,9	100	100	100	100	100	100	100
Russia	8660	66	12,0	51	93	84	88	8	28	37

## Notes:

1. Normal development index (D) calculated from formula:  $D_{ij} = \{(A_{ij}/A_x) * (B_{ij}/B_x) * (C_{ij}/C_x)\}^{1/3} * 100$ , % , where  $A_{ij}$ ,  $B_{ij}$ ,  $C_{ij}$  for each (i) country/region and for each (j) year denote respectively the per capita GDP in 2001 PPP, dollars, the average lifespan and the average number of years education of the adult population, adjusted for quality, and  $A_x$ ,  $B_x$ ,  $C_x$  are the analogous indicators for the USA for 2001.

2. The income equality index  $E_i = (1 - G_i)/(1 - G_x) * 100$ , % , where  $G_i$  and  $G_x$  are the Gini coefficients in the country (i) and the USA.

3. The gender equality index ( $F_i$ ), % is the unweighted mean of four subindices, compared to the indicator for the USA (in the fields of employment, education, on basis of income, on basis of participation in government and parliament).

4.  $G_i = (E_i * F_i)^{0.5}$ .

5. I is the unweighted mean of the relative indices of dissemination of the latest means of communication and information technology/computing (mobile telephones, personal computers connected to Internet), compared to the level in the USA (in %).

6. S is the unweighted mean of the economic freedom indices, and also the quality of state institutions, compared to the level in the USA, in % (initial data of D. Kaufmann, A. Kraay and M. Mastruzzi).

7. Calculated from the formula

$U_{ij} = \{(A_{ij}/A_x) * (B_{ij}/B_x) * (C_{ij}/C_x) * (G_{ij}/G_x) * (I_{ij}/I_x) * (S_{ij}/S_x)\}^{1/6} * 100$ , %.

$A_x \dots S_x$  are the corresponding indicators for the USA for 2001.

Based on the sources for Table 1, and also UNDP. Human Development Report, 1991-2003. New York; The Heritage Foundation. 2003 Index of Economic Freedom. Washington, D.C., 2003. pp.21-25; Kaufmann, D., Kraay, A., Mastruzzi, M., 2003, Governance Matters III: Governance Indicators for 1996-2002. Washington, D.C. pp.98-115.

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