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Armenia

Building a Competitive Economy

by Suren Musayelyan

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Armenia: Building a Competitive Economy

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INTRODUCTION

Aspirations of decades or even centuries to live as an independent nation-state and govern oneself politically and economically were fulfilled for Armenians in 1991 when the tiny South Caucasus nation gained independence after living for nearly 70 years under Soviet rule. But the heavy legacy of the Soviet past, including decades of living under a centralized planned economy system, as well as an extremely difficult geopolitical situation in the volatile region bode ill for a smooth transition to a free market economy.

The objective of the current research is to outline a vision of the future of Armenia's development given the necessity of enhancing competitiveness both in the public and private sectors of the national economy in order to meet the mounting global political and economic challenges to small newly independent nations in the present-day world.

Competitiveness in this report will be regarded as one of the main drivers of a more prosperous and successful economic and political future for Armenia. But since Armenia is situated in a difficult geopolitical region which has gone through tumultuous times in the recent decade and a half, implications of geopolitical decision-making cannot be underestimated.

Some of the more obvious future trends, such as resolving hardened disputes with neighbours and developing closer ties with them as well as with other partners, including the European Union, will fully fit in the comparative analysis of the country's economic situation with some peer or formerly comparator economies (e.g. Ireland, Finland, etc.).

* * * * *

Armenians, who have lived in the Armenian plateau since ancient times, were given the first chance for an independent life in modern history after the end of World War I. The first Armenian republic (1918-1920), however, had a short life in the turbulent times of the post-war period as it was eventually overrun by Bolshevik Russia and Kemalist Turkey, with its eastern part (currently constituting the Republic of Armenia) Sovetized and annexed to Soviet Russia, later to become a part of the Soviet Union.

While the tragic pages of Armenian history in the early 20th century continue to bear a strong mark on Armenia's present state[1], this research, however, will only review the period of Armenia's second independence achieved after the disintegration of the USSR.

The period from 1991 to 2008 can be conventionally divided into three periods of development: the 'survival struggle' in the first several years of independence was followed by a 'period of recovery' when the nation managed to rebuild some of its capacities lost during the years of severe crises. The most recent period from 2000 up to the present has been as a period of `sustainable economic growth'. Experts, however, argue this growth has been largely dependent on external factors.[2]

[1] Mass killings and deportations of Armenians in the crumbling Ottoman Empire in the period of 1915-1918 gave rise to Armenian Diasporas in different countries of the world, including the United States, France, countries of the Middle East and others. Many of the descendants of that generation of Armenians continue to feel strong affiliation with their historical homeland.

[2] The Economy and Value Research Center, 'National Competitiveness Report Armenia 2008', p. 6

The next stage that the Armenian economy is entering at present is characterized by the apparent need to achieve a higher degree of competitiveness which eventually will determine whether Armenia can indeed be economically sustainable and less dependent on factors that are outside its control.

There are a lot of factors that will determine the future of Armenia, e.g. whether it can emerge from the current global economic crisis with minimal losses or how well it will be able to develop its relations with neighbours and solve other geopolitical concerns. Continued remittances by Armenian labour migrants and direct foreign investments by Diaspora Armenians, foreign assistance and more accessible international loans will still be a matter of urgency for the country's economy in the foreseeable future, but it is beyond all doubt that in order to achieve long-term prosperity Armenia needs to move towards a more knowledge-based and knowledge-driven economy that will clearly show its advantages over other markets in the region and elsewhere in the world and will eventually enhance its international competitiveness.

The implementation of the tasks of achieving a more competitive economy is incumbent on the new leadership formed as a result of last year's presidential election. These tasks have to be realized in the extraordinary conditions of the continuing global economic downturn that has also had its impact on the Armenian economy.

Speaking in the Armenian parliament on 12 November 2008, the country's Prime Minister Tigran Sargsyan, however, argued that the time of the global economic downturn which, though puts an additional strain on the Armenian economy, might in fact be a good time for developing countries, like Armenia, to reveal their competitive advantages.[3]

"The global financial and economic crisis is like a special self-regulatory mechanism and also a way of bridging the existing huge gap between the developed and developing countries. With the difficulties it creates, it also provides an extensively wide scope for developing countries and reveals their competitive advantages," Sargsyan said.

Among the key objectives of this research is to define competitiveness and how it relates to small nations like Armenia. The analysis of a number of recent publications and reports on the standing of nations in the global economy will help to establish how competitive Armenia is at present and identify areas most problematic in terms of competitiveness.

The present state of economy and obstacles to better economic performance, including geopolitics, the work of institutions, etc. will also be discussed.
The experience of other nations comparable to Armenia retrospectively or at the present time will provide insights into how small nations can use their existing potential to achieve higher degrees of productivity and eventually build their prosperity. Such aspects as infrastructure development, improved transportation and communications, technological advancement, education and training, production upgrading, innovation and cluster approach will be of particular interest for Armenia, a land-locked country lacking vast natural resources.

[3] The Republic of Armenia Government's official website, Prime Minister Tigran Sargsyan's Speech in the National Assembly Introducing the 2009 Draft State Budget, 12 November 2008.

CHAPTER I.

Defining competitiveness. How competitive Armenia is and why.

In recent months several prestigious international institutions have released indexes by and large praising Armenia's economic progress. One of the latest examples is the 2009 Index of Economic Freedom[4] released by the Heritage Foundation and The Wall Street Journal which ranks Armenia as high as 31st among 179 countries on 10 economic factors like trade barriers, property rights, taxes and market regulations. Interestingly, Armenia by this

[4] The Heritage Foundation and The Wall Street Journal (www.heritage.org), '2009 Index of Economic Freedom', January 2009.

ranking is ahead of all other Commonwealth of Independent States (CIS) nations and several European Union countries such as France and the Czech Republic.

In the latest 'Doing Business' report of the World Bank and the International Finance Corporation Armenia ranks as high as 44th among 181 economies by the overall ease of doing business in a country based on a number of indicators of business regulation.[5]

Similarly, Armenia's large international donors such as the International Monetary Fund (IMF)[6] and the World Bank[7] have also been mostly positive and supportive of the economic reforms carried out in the country in recent years.

But while Armenia has posted high rates of growth[8] and has been rated fairly high on most macro-economic parameters, it has also been ranked rather low in terms of overall national competitiveness.

It should be said, however, that despite the presence of a variety of publications dealing with national competitiveness, this concept has not been very well established yet.

The Business Dictionary defines competitiveness as follows: "Ability of a firm or a nation to offer products and services that meet the quality standards of the local and world markets at prices that are competitive and provide adequate returns on the resources employed or consumed in producing them."[9]

Competitiveness has preoccupied the minds of many economists since the time when the economist Adam Smith published his work on the wealth of nations.[10] There has been a revival of interest in the issue of international competitiveness in recent years and a renewed concern with the sources of nations' wealth.[11]

Theories on competitiveness are loose by their nature because of a great number and variety of aspects involved. One of the advanced theories, by Michael Porter of the Harvard Business School, sets forth the so-called 'diamond model' arguing that national prosperity is not inherited, but is created by choices.[12]

Some economists, like for example Paul Krugman, winner of the 2008 Nobel Memorial Prize in Economic Sciences, opposed the notion and argued that the doctrine of competitiveness is 'flatly wrong' as nations do not compete against each other like big corporations.[13]

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[5] The World Bank and the International Finance Corporation, 'Doing Business 2009', (Palgrave Macmillan, World Bank, September 2008).

[6] www.imf.org

[7] www.worldbank.org

[8] According to the National Statistical Service of Armenia, the country's economy showed a double-digit growth for six consecutive years beginning in 2002 and slowed down to a single digit only at the end of 2008, supposedly influenced by the adverse effects of the global economy (the officially posted GDP growth in 2008 was 6.8 per cent, in contrast to 13.8 per cent posted for 2007).

[9] Online Business Dictionary (BusinessDictionary.com)

[10] Reference to Adam Smith's 'Wealth of Nations' (1776).

[11] Marcela Miozzo and Vivien Walsh, "International Competitiveness and Technological Change" (Oxford University Press, Inc., New York, 2006), p. 1.

[12] Dong-Sung Cho & Hwy-Chang Moon, 'From Adam Smith to Michael Porter, Evolution of Competitiveness Theory', Asia-Pacific Business Series, Vol. 2 (Seoul National University, 2000).

[13] Paul Krugman, 'Competitiveness: A Dangerous Obsession', (Foreign Affairs, 1994).

According to Krugman, the world's leading nations are not, to any important degree, in economic competition with each other. Nor can their major economic woes be attributed to 'losing' on world markets… He concludes that 'competitiveness is a seductive idea, promising easy answers to complex problems. But the result of this obsession is misallocated resources, trade frictions and bad domestic economic policies.'

It should be said that major problems with the concept stem from the fact that because of the complicated nature of competitiveness the issue attracts researchers from different disciplines with varied research interests and approaches. Therefore, the current research does not purport to cover all its aspects. In some cases the term 'competitiveness' or the description 'competitive' will be used in the sense perceived by a layman rather than a narrowly specialized economist.

And so, what competitiveness or being competitive stands for? And why do nations compete or need to compete?

Renowned economist Stephane Garelli, the author of the World Competitiveness Yearbook[14] and a pioneer in competitiveness research, asks this question in one of his works and immediately gives a straightforward answer: "In short, to increase their standard of living."[15]

He goes on to present what he calls the 'official' definition of a nation's competitiveness, which is: "The degree to which a country can, under free and fair market conditions, produce goods and services which meet the test of international markets, while simultaneously maintaining and expanding the real incomes of its people over the long term."

Essentially, national competitiveness can be defined as sustained increases in productivity to achieve higher wages and living standards. It is added value achieved through a higher degree of productivity, technological improvements, a better quality of production and services and innovation (and not through cheap labor, special tax exemption schemes and undervaluing of national currency) that defines true competitiveness.

For quite a long time the issue of national competitiveness had been neglected in Armenia for a number of objective and subjective reasons. It was not until late 2007 that the National Competitiveness Council of Armenia (NCCA)[16] was established.

The NCCA is a quasi-governmental foundation launched by the Government of Armenia with a national mandate aimed at enhancing Armenia's global competitiveness and promoting sustainable development of the country. The Council is headed by the country's PM and its members include state and private sector representatives.

Earlier, a scenario-building project, Armenia-2020, had been launched to focus on the identification of alternative development models for Armenia until the year 2020.[17]

[14] The IMD World Competitiveness Yearbook has been published for 20 years. Armenia has not been among the economies covered by this report.
[15] Stephane Garelli, "The Competitiveness of Nations in a Global Knowledge-based Economy," (H.H. Chartrand, 2002).
[16] For more information visit www.competearmenia.org

In the introduction to this work we have already conventionally divided Armenia's transition into three periods, including:

- Survival (1991-1994)
- Rehabilitation (1994-2000)
- Growth (2000-2 – to present)

However, the financial and economic crisis that spread around the world in 2008 once again challenged small nations to search for hidden potentials to remain sustainable in the volatile world economy. Therefore, achieving a higher degree of competitiveness becomes even more important for developing economies.

Several studies of late have attempted to gauge Armenia's competitiveness on the global scale, with conclusions drawn about certain disproportions and suggestions made for an overhaul of policies in some areas to enhance competitiveness.

The 2008-2009 Global Competitiveness Report[18] (GCR) of the World Economic Forum (WEF) and its newly introduced single Global Competitive Index (GCI) have been an important tool for measuring competitiveness across countries and an indispensable prompt to identify policies to be at the forefront of policy action depending on what part of a given country's economy needs greater concentration of effort.

It is the fourth time Armenia has been included in the report, which in its latest edition covers 134 nations.

Overall, Armenia has remained steadily in the average positions of the group of nations that are at the so-called 'Low' stage of development. The latest report ranks the Armenian economy only 97th among the 134 nations covered – or a fall by four places from the previous survey that covered 131 nations.

The score assigned by the WEF is based on 12 "pillars of competitiveness" including: *Institutions; Infrastructure; Macroeconomic stability; Health and primary education; Higher education and training; Goods market efficiency; Labor market efficiency; Financial market sophistication; Technological readiness; Market size; Business sophistication; Innovation.* Each pillar in turn is divided into subcategories dealing with various related areas. Thus, Armenia was judged to be lacking competitiveness primarily because of the small size of its market, insufficient innovation as well as poor "technological readiness" and "business sophistication." It is assumed that tackling problems included in the pillars is an essential condition for better competitiveness.

The GCR admits that no consensus on the causes of productivity has been achieved yet in the academic literature and that it is due to the sheer number and variety of influences on national productivity[19]. At the same time, it has been long viewed as a globally recognized

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[17] For more information visit www.armenia2020.org

[18] The 2008-2009 Global Competitiveness Report of the World Economic Forum (www.weforum.org), October 2008

[19] The 2008-2009 Global Competitiveness Report, WEF (www.weforum.org), 'Moving to a New Global Competitiveness Index' (October 2008), p 44.

ranking of country competitiveness and a tool for benchmarking country strengths and weaknesses.

The GCR's new index measuring competitiveness is a result of complex academic effort. In essence, it deals with the foundation of competitiveness or prosperity and covers important categories of productivity drivers, such as the role of institutions, openness to trade and investments, geographic location, the quality of the business environment and others. Its elements include: *Productivity, Endowments, Macroeconomics, Microeconomics, Stages of Economic Development*. These, in turn, cover a wide range of areas, such as *fiscal and monetary policies, company sophistication, business environment quality, clusters*, and others.

While it may seem that preserving positions in the increasingly competitive world is an achievement in itself, many still believe that no progress eventually means lagging behind and missing the opportunity of climbing up the ladder.

Manuk Hergnyan, of the Economy and Value Research Center[20], who presented the findings in Yerevan last October, argued that making no progress is tantamount to rolling back.

"Competition among nations is growing stronger and it means that if we do not move forward, then we are moving backward," he said. [21]

"Competitiveness is not subject to very quick changes. Gradual actions aiming at mid-term development are needed to achieve a tangible change."

Hergnyan said Armenia's lack of progress in competitiveness was mainly due to 'technological parameters', including innovation components and technological readiness. According to the specialist, while some indices such as budget deficits can be changed within a fairly short amount of time, e.g. within a year, such parameters as technological readiness or innovation components require a much longer time.

Some worsening was also shown on macroeconomics, such as the budget deficit (2.8%), which, though, according to experts, is within the maximum 3% considered to be normal.[22] The excessively large spread between rates of attraction of deposits and lending by banks also affected Armenia's standing, according to the reported data.

In contrast, the workforce market index shows Armenia favorably – in fact the highest, 45th position across all indices. This is down to the flexible system of hiring and firing.

The positive element in the GCR for Armenia is that it is shown as moving up in the group of countries classed as those based on exploitation of resources and to be in transition toward the second group of countries whose economies are based on efficiency.[23]

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[20] The Economy and Value Research is a partner of the WEF's Global Competitiveness Network that provided materials and studies for the Armenia report.
[21] Delovoy Express business weekly, 'Not Making Headway for a Country Means Rolling Back', issue 37 (791), October, Yerevan
[22] More than 60 countries covered by the GCR posted budget surplus.
[23] The still higher class, according to the GCR, includes countries whose economies are based on innovations.

In its latest analytical piece a think-tank based in Yerevan, the Civilitas Foundation, also attempts to draw conclusions from the assessments provided by the prestigious international report.

According to the study *Armenia 2008: Crisis and Opportunity*[24] unveiled in December 2008, Armenia does 'very badly' in this competition. The study also assesses Georgia (ranked 90th) as doing 'only a little better', while saying that Azerbaijan is 'noticeably stronger' at 69th.[25]

Both Georgia (which has a slightly larger market, a higher degree of regional cooperation and better geographic location than Armenia) and oil-rich Azerbaijan are also ranked among countries at the 'low' stage of development. Interestingly, such regional powerhouses as Russia and Ukraine, which boast big market sizes and vast natural resources, while are ranked higher than Armenia, but are still in the same bigger category of countries that are at the low stage of development. Estonia is the only post-Soviet state that is included in the 'High' category, while Latvia is in the 'Middle' category.[26]

Armenia's overall good performance in one part of the macroeconomic area, including fiscal and monetary policy, has been partly due to the very tight policy of the CBA over years that has checked inflation within one of the tightest limits among former Soviet republics.[27]

With the slowdown of GDP growth in late 2008, Armenia's economy is expected to expand at a 5.5% rate in 2009 according to EBRD forecasts (with 3 and 8% growth rates forecast for Georgia and Azerbaijan, respectively).[28]

In contrast, the World Bank in late February forecast a zero GDP growth for Armenia, considering "the recent unfavorable trends in the global economy, as well as a worse economic situation in Russia, Armenia's major trade partner."[29]

Armenia's GDP has grown at a staggering pace over the past several years and despite claims that the composition of that growth was largely based on construction and services and that it did not benefit the population more or less proportionately, it has been acknowledged that the government has been able to increase population welfare and reduce

[24] Available in full on www.civilitasfoundation.org

[25] Georgia and Azerbaijan, both former USSR republics, are Armenia's immediate neighbours in the South Caucasus.

[26] The top ten countries according to the 2008-2009 GCI are the United States, Switzerland, Denmark, Sweden, Singapore, Finland, Germany, Netherlands, Japan and Canada.

[27] An inflation of only 5.2% in 2008 (despite the economic crisis that started in the world) favorably compares to inflation levels in Georgia (8%) and Azerbaijan (15.4%) or even such more advanced economies as Estonia (about 11%). Moreover, the Central Bank of Armenia expects the 2009 inflation to be within the limit of only 4%. (Data from the National Statistical Services of Armenia. Source of reference: Regnum.ru economic reviews for CIS countries).

[28] The forecasts made by the European Bank for Reconstruction and Development (EBRD). Later forecasts made by the WB suggested that Armenia's economy would at best post zero growth, while according to the IMF forecast, there would be a drop of 1.5%.

[29] Arka news agency report, 'WB Forecasts Zero GDP Growth in Armenia in 2009', quoting Aristomene Varoudakis, Head of the WB office in Yerevan; 25.02.2009

poverty.[30] It is sufficient to say that Armenia was among the CIS countries that showed one of the best records in the world according to real wage growth rates, achieving annual wage growth rates higher than 10%.[31] This, however, has been part of the recovery process following the huge fall in [real] wages at the start of economic transition.[32]

* * * * *

So, why has Armenia been unable to pull itself closer, economically, to the 'leading pack' of nations?

Interestingly, it is the subcategories to the main GCR sections that make the difference.

The study *Armenia 2008: Crisis and Opportunity* highlights 'more interesting insights' that come from looking at some of the over 100 individual factors that are aggregated to produce the ranking. Like many other publications it acknowledges that Armenia does well in such areas as the flexibility of its labor code (hiring and firing), the flexibility of wage determination, school and university enrollment rates, female participation in the workforce, and low terrorism and crime rates: "But predictably, the structure of Armenia's economy is a problem for the country when it comes to a cluster of factors that reflect the effects of the local business elite. Armenia is practically the worst place in the world in terms of the "Extent of Market Domination": 133rd place out of 134 countries – only Mauritania is worse. On both "Intensity of Local Competition" and "Effectiveness of Antimonopoly Policy" it ranks 132nd, barely ahead of countries like Chad or Bosnia." [33]

Analyst Richard Giragosian, currently director of the Yerevan-based Armenian Center for National and International Studies, writes in a regular ArmeniaNow column that in the case of Armenia, "the economic system has been distorted, with commodity-based cartels and monopolies garnering a dangerous degree of power and position within the economy."[34]

While the factors mentioned in the Civilitas study are essential in determining a country's position in competitiveness, improvement on them can hardly move the country's economy further unless accompanied by a whole number of other strategic choices that need to be made by the leadership in the longer run.

One of the long-term deterrents of investment and international business is the volatile geopolitical situation in the South Caucasus. Of its four neighbors, Armenia currently has diplomatic relations only with two, namely Georgia and Iran, which in their turn have sour relations (to say the least) with Armenia's other important partners, Russia and the West,

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[30] Despite the wide perception and acknowledgement of the very uneven distribution of wealth resulting from the economic growth, Armenia's GDP per capita in PPP terms passed the USD 5,000 level in 2006, putting Armenia in the group of lower middle-income countries according to the World Bank criteria ('National Competitiveness Report 2008').

[31] Global Wage Report 2008/09, 'Minimum wages and collective bargaining: Towards policy coherence', International Labour Office, Geneva, 2008

[32] Real wages fell to one-fifth of their initial level during the early 1990s. In 2006, real wages were still slightly below the 1991 level.

[33] Civilitas Foundation (www.civilitasfoundation.org), 'Armenia 2008: Crisis and Opportunity', (Yerevan, December 2008), p. 56

[34] Richard Giragosian, 'Weathering the Storm: A commentary on Armenia and the Economics of Power', ArmeniaNow Online Magazine, 13 February, 2009.

respectively. But major problems for Armenia stem from not having relations with Turkey and its ethnic ally Azerbaijan and in fact being blockaded by the two since the early 1990s.

Another major drawback that keeps Armenia back from progress is domestic difficulties, mainly connected with the rule of law, the judiciary, an insufficient level of democratic practice, and the lack of a credible record for holding elections. These problems have persisted under successive governments resulting in a perceived illegitimacy of political leadership making it less likely to press ahead with reforms and more likely to abuse power for the sake of staying in office (?).

CHAPTER II.

Present state of economy. Obstacles to better performance.

There is a general consensus in the Armenian leadership that enhancing competitiveness is the ultimate way of achieving long-term prosperity. With a great number of obstacles and difficulties facing the country, further progress is conditional on strategic choices to be made in the next 5 to 10 years.

But for the current global economic downturn, Armenia would have registered a double-digit (or close to double-digit) economic growth for the seventh consecutive year in 2008.

The war with neighbouring Azerbaijan over Nagorno-Karabakh with all its ramifications and the consequences of the devastating earthquake of 1988 conditioned an extremely rough start for independent Armenia. The blockades imposed by two of its neighbours, namely Azerbaijan and Turkey, resulted in a severe energy crisis and shortages of essential commodities. The situation caused a large-scale migration from the country.

Restoration of energy and other vital infrastructure began with the signing in 1994 of a Russia-brokered ceasefire with Azerbaijan to end hostilities in Nagorno-Karabakh. In fact, it was in 1994 that after a more than 50% decline in GDP between 1991 and 1993, Armenia recorded 5.4% growth. Since then and until late 2008 the GDP has grown at an annual compound rate of 8.2%. It is noteworthy that Armenia's GDP level surpassed the 1990 (pre-independence) level in 2004.[35]

[35] The Economy and Value Research Center, 'National Competitiveness Report Armenia 2008', p. 16

The growth, however, has been largely dependent on external factors[36], such as private remittances of migrant workers or citizens of foreign states of Armenian origin with strong bonds to their historical homeland[37], assistance from international financial and donor organizations, investments by foreigners, mostly of Armenian origin, in booming construction, a sector that accounted for a substantial part of the robust economic growth over the time.

But the global downturn and recession in many leading industrialized markets threatening to grow into further depression has had a major impact on these factors thus slowing the economy down to only 6.8% in 2008.[38]

Between 2000-2006, Armenia's compound annual growth rate (CAGR) of GDP per capita was 12.89%, outpacing neighbouring countries, including Georgia (8.74%), Turkey (3.25%) and Iran (4.14%), as well as its regional peer/comparator countries, including Jordan (3.70%), Estonia (9.15%), Latvia (9.47%), Lithuania (8.24%), Slovenia (3.66%) and Romania (6.75%), although lagging behind Azerbaijan (15.75%). However, a closer look shows that in absolute terms the level of Armenia's GDP, based on purchasing power parity (PPP) as well as GDP per capita, still remains low and lags behind most of its competitor and peer countries.[39]

Economic growth in Armenia has not resulted in corresponding wage growth: wage levels reached only around 40% of 1990 levels (despite record real wage growth rates referred to in the previous chapter).

The fundamental problem with the growth – and this has been acknowledged by the authorities themselves – is that it was driven mainly by investments in the construction sector and services.

In 2007, the year that preceded the slowdown, construction accounted for 25.6% of Armenia's GDP, followed by agriculture (17.4%) and industrial sectors (15.6%).[40]

The booming construction sector driven by multimillion dollar foreign (mainly Diaspora Armenian) investments proved the main driver of economic growth as it accounted for 32.9% of GDP growth in 2007. The slowdown of GDP in 2008 was partly because of the slowdown in construction and withheld investments because of the start of the world economic crisis. Studies predict that as the crisis gets more acute, it is likely that the portion of investments made in construction will become more dependent on the economic conditions in the countries from where this investment is made and will also be more sensitive to the rate of return on those investments in Armenia.[41]

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[36] The Economy and Value Research Center, 'National Competitiveness Report Armenia 2008', p. 6
[37] Researches of Armenian migration and remittances distinguish between 'new Diaspora' and 'old Diaspora', as in: King Banaian, Bryan Roberts, 'Remittances in Armenia': The Impacts of Remittances on the Economy and Measures to Enhance their Contribution to Development', Armenian Journal of Public Policy, January 2007.
[38] Data by the Armenian National Statistical Service, ArmStat, January 2009
[39] The Economy and Value Research Center, 'National Competitiveness Report Armenia 2008', p. 17
[40] NSS data.
[41] Policy Forum Armenia, 'Implications of the World's Financial Crisis for Armenia's Economy', December 2008.

Increased consumption was another driver that accounted for high growth rates in the services and retail trade sectors. It was largely conditioned by the increasing amount of cash flowing into Armenia's economy, with a substantial part of it being cash remittances received by Armenian households from their extended families living or working abroad. It is estimated that remittances that households in Armenia have received in recent years make some 20% of GDP. However, remittances tend to be underreported in household survey data.[42]

Statistics on Armenia's migration contains considerable variations, but modest figures suggest that some 475,000 left their countries in the period of the war and severe energy crisis. Emigration continued at a lower rate also after the restoration of energy supply and other vital infrastructure in 1994-1995.[43] Only few of them returned later for permanent residence in Armenia.

The new migrants joined a large number of 'old migrants' or the descendants of 'old migrants' – the Armenians who fled the atrocities in Ottoman Turkey during World War I and were able to achieve in first or subsequent generations a considerable level of welfare and social status in western societies, such as in France, the United States, Canada, or elsewhere in the world, such as in Russia, Middle Eastern countries, Latin America, Australia, etc..[44]

According to an estimated rate of remittances made to Armenia based on the CBA and the World Bank, they rose from $650,000 in 1995 to as high as 1.4 billion in late 2007.[45] The real figure for remittances is thought to be even higher.[46]

The increase in remittances proceeded at a very fast rate especially in recent years when the economic conjuncture was auspicious for Armenian labour migrants abroad, such as in Russia.[47] This, however, leaves the remittances heavily dependent on the developments in Russia[48] and in particular two sectors of the Russian economy where Armenians are mainly engaged -- trade and construction. A slowdown in Russia's construction sector and so the impact of this on Armenia is likely to be felt very soon.[49]

The data from the CBA for late 2008 showed the total value of non-commercial cash transfers processed by Armenian banks rising by 26.2% year-on-year to almost 1.5 billion in January-November 2008 (an equivalent of almost 14% of GDP). Remittances began to show a decline in November 2008 (down by more than 7% from the November 2007 level).

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[42] J. Scott Shonkwiler, Daivd A. Grigorian, and Tigran A. Melkonyan, 'Garbage In, Gospel Out? Controlling for the Underreporting of Remittances', (IMF Working Paper, October 2008)

[43] Armen Yeghiazaryan, Vahram Avanesian, Nelson Shahnazaryan, jointly with America CJSC, 'How to Reverse Emigration', (Armenia 2020, 2003), p 4.

[44] According to some estimates, the total number of ethnic Armenians in the world today may reach 9 million, of whom only about 3 million live in Armenia and about 130,000 in Nagorno-Karabakh.

[45] Migration Information Source, based on CBA and WB data.

[46] Due to underreporting of remittances (see above) and due to the fact that an estimated 35% of remittances are sent through informal channels according to the NSS surveys.

[47] Russia itself had enjoyed a high rate of economic growth mainly owing to higher oil prices on the world market in recent years.

[48] Russia is home to hundreds of thousands of Armenian migrant workers (official statistics tends to vary).

[49] Policy Forum Armenia, 'Implications of the World's Financial Crisis for Armenia's Economy', December 2008.

It was during the period of increased cash inflows that the economy began to experience the so-called 'Dutch disease'[50], which resulted in a dramatic appreciation of the national currency, the dram. Against the background of the US administration's 'cheap dollar' policy, the dollar and other major world currencies lost nearly half of their value against the Armenian currency in the period from 2003 to 2008.

The appreciation of the national currency made the country's manufactured goods less competitive and induced a persistent trade deficit.

The situation resulted in a more import-oriented economy as large importers found it extremely lucrative given the currency situation. While the share of exports also grew, it was lagging far behind imports resulting in a large negative foreign trade balance.[51]

While a number of economists fumed that the situation would spell a debacle for Armenia in the long term, others took it in its stride saying that as far as there is cash to finance the difference, things will be normal. Some, though, feared that the time was approaching when remittances and other foreign cash flows would drastically be reduced.[52]

Eventually, on March 3, 2009, Armenia's Central Bank (CBA) had to devalue the national currency by 22% as part of an agreement with the IMF for a $540m bailout.[53]

The latest economic crisis that began for the industrialized nations early in 2008 was not felt in Armenia until the end of the year when several companies announced job cuts, including in the IT and mining industries – two of the main pillars of Armenia's domestic economy.

A slowdown in growth and a lower prediction for next year's expansion may also have some connection with decreased expectations of private remittances in the economy. Such remittances are coming mostly from countries that will feel the impact of the global downturn most severely during the current year.

The economy also entered the year 2009 with government plans to stimulate businesses through projects the main financing of which, it is hoped, will come from international institutions or foreign governments.[54]

But the obstacles to better economic performance in Armenia are far more than that. Relations with neighbours are of extreme importance for Armenia, which is situated in a tough geopolitical region. Equally important for the country is democratization as a resource for competition with neighbours.

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[50] King Banaian, Bryan Roberts, 'Remittances in Armenia II': The Impacts of Remittances on the Economy and Measures to Enhance their Contribution to Development', (Armenian Journal of Public Policy, January 2007), p 236.
[51] The Armenian trade deficit increased by nearly 30 per cent year-on-year to pass the $3 billion mark in the first eleven months of 2008. The full-year figure for 2007 reported by the NSS was only $2.12 billion. Source: Armenian National Statistics Service
[52] Author article, Suren Musayelyan, 'Riding A Currency Wave: The Impact of Armenia's 'Floating Rate'', AGBU 11/1/2007 Issue (available at www.agbu.org).
[53] Helena Bedwell, Emma O'Brien, 'Armenia Devalues Dram to Clinch $530m IMF Loan', Bloomberg.com, 03/03/2009.
[54] Such as a $500m loan from Russia agreed upon in early 2009, or World Bank and IMF loans.

Robin Bhatty identifies several essential factors as impediments to reforms in the three South Caucasian republics, including Armenia: endemic corruption, the after-effects of war and the threat of its resumption, weak state capacity manifested in limited administrative and regulatory capacities, and impediments to inter-regional and international trade.[55]

At present, Armenia's geopolitical environment is characterized by a high level of uncertainty and a set of risks, primarily because of the existing unresolved problems with Azerbaijan and Turkey. This situation is a deterrent to potential foreign investments and accounts for enormous opportunity costs because of the absence of economic relations with these two neighbors.

At present, Armenia relies heavily on Russia for its security. Armenia is one of the few former Soviet republics that hosts a Russian military base and depends on Russian frontier-guards to patrol its border with Turkey and partly with Iran. This geopolitical situation makes Armenia also extremely dependent on Russia in other spheres, something that Russian state-owned and private companies seem to have taken advantage of.[56]

The recent efforts made by the new Armenian leadership towards establishing diplomatic relations with Turkey and some movement towards a comprehensive solution to the Nagorno-Karabakh conflict, if successful, may significantly minimize the risks of 'putting all eggs in the Russian basket'. They may also make Armenia less dependent on Russia for security and therefore more open to other partners, such as in particular the European Union. Positive developments may likewise contribute to Turkey's prospects of European Union membership, bringing the EU border just to Armenia's doorstep.

These concerns were particularly increased after the war between Russia and Georgia over the breakaway Georgian province of South Ossetia in August 2008.

Armenia, which maintained its neutrality despite having allied relations with Russia and in fact a defense treaty with a Russia-led group of seven ex-Soviet nations[57], suffered huge economic losses as a result of the war. Because of the absence of alternative gateways, up to 70% of land-locked Armenia's trade is conducted via Georgian territory. The hostilities paralyzed trade for days, resulting in (at least) shortages of fuel in Armenia. The authorities later declared losses of nearly $680m as a result of the conflict in the neighboring republic.[58]

But apart from geopolitical concerns, Armenia needs to deepen and widen its democratic institutions and civil society. Armenia, which was often referred to in the 1990s as an

[55] Robin S. Bhatty, 'Tough Choices: Observations on the Political Economy of Armenia, Azerbaijan, and Georgia,' Mimeo, prepared for the World Bank, December 2002.

[56] Emil Danielyan, 'Russia Steps Up Economic Presence in Armenia', EurasiaNet, 11/16/06 (available at www.eurasianet.org)

[57] The Collective Security Treaty Organization was founded on October 7, 2002 by a charter signed by the presidents of Armenia, Belarus, Kazakhstan, Kyrgyzstan, Russia and Tajikistan. Uzbekistan joined in 2006.

[58] Source: RFE/RL's Armenian Service, interview with Armenian National Security Secretary Artur Baghdasaryan, 'Armenia Claims Huge Losses From Georgian Crisis', 03/09/2009 (available at www.armenialiberty.org).

'island of democracy' in the Caucasus, currently hardly scores any high marks for democratic freedoms and liberties.

The March 1-2, 2008 post-election developments show that unless credible electoral practices are put in place, no government can be regarded as legitimate enough to initiate drastic reforms and most importantly carry them through. In this view, democracy represents a powerful internal resource for Armenia that can have huge influence on how successful the country can be in its efforts to achieve an economic breakthrough.

Despite legislations put in place, the practice of democracy remains extremely poor in the country. This concerns a majority of spheres, including freedom of speech, human rights, holding of elections, state administration and others.

This is reflected also in the reports by various international rights watchdogs, such as Freedom House, Reporters Without Borders, Transparency International, and others.

The role of institutions, good governance and rule of law are matters of great consequence also for the competitiveness of national economy.

And much in this sense hinges on how far the government would be willing and ready to go in fighting the malady of all post-Soviet states -- corruption.

Corruption is a single big area where the government, according to various NGOs and watchdogs, has been underperforming, despite the presence of a sound anti-corruption action plan.[59]

Corruption has been singled out as the "most problematic" factor for doing business in Armenia, according to the GCR authors. In particular, the pollsters had asked respondents to select the five most problematic factors for doing business in Armenia from a list of 15 factors and rank them between 1 and 5. Thus, 17.5% of respondents mentioned corruption as a matter of the greatest concern, compared to only 5.6% mentioning policy instability and only 0.4% poor public health. This raises concerns about the role of institutions and rule of law, as well as the improvement of governance.

In recent years, the annual corruption perception index of anti-graft watchdog Transparency International[60] has shown no positive trend in changes in Armenian perceptions of corruption. The country is ranked 109th among 180 nations according to the 2008 index.

The role of institutions is particularly important for a more equal distribution of any national welfare to be achieved in the future. Higher rates of economic growth, otherwise, remain inaccessible for a majority of the population and benefit only the elite minority.

[59] The government anti-corruption action plan was launched by the Armenian Government in late 2003; amid widespread skepticism from NGOs and general public its realization has been described by government officials as a success. The government is developing another plan that will cover a period until 2012.
[60] Berlin-based Transparency International (www.transparency.org) is an international non-governmental organization which also has an affiliate in Armenia. TI has published its annual corruption perception index since 1995.

CHAPTER III.

Experience of others

A large migration of the young able-bodied population, high rates of unemployment, balance-of-payment pressures, a low competitiveness of local firms internationally…

The comments above[61] might as well be applicable to describe Armenia's challenges, but they actually refer to the state of economic affairs in the 1950s-1970s in what would later emerge as 'Celtic' and 'Nordic' tigers[62][63].

Ireland and Finland are just two of the illustrative examples of how a relatively poor (according to European standards) country can transform into a competitive, dynamically developing economy due to switching to novel models of growth based on knowledge.

Both Ireland and Finland had gone through ups and downs until they found their own ways to the top of competitiveness.

After decades of underperforming, Ireland transformed itself into one of the world's fastest growing economies in the 1990s.

From 1987 until the end of the century Ireland's economic growth (GNP) averaged over 5%. Between 1987 and 2003 unemployment fell from 17 to 4%.[64]

Many researchers have pointed out that the case of Ireland is relevant to Armenia at least in two respects:

- comparable size (e.g. country size, population)[65]
- many similar characteristics in the economy back in the 1970s (e.g. outward migration, small domestic market, inequitable wealth distribution, predominantly rural economy, growing regional disparities, low competitiveness of local business, high levels of unemployment and poverty, low GDP per capita compared to Europe, unexploited export potential to larger 'near markets'.[66]

[61] Sources: CÓ Gráda, 'Rocky Road: The Irish Economy Since the 1920s', (Books.google.com, 1997), p.25
[61] Fred Singleton, 'The Economy of Finland in the Twentieth Century', (University of Bradford, 1986). p. 152
[62] Sean Dorgan, 'How Ireland Became the Celtic Tiger', The Heritage Foundation: June 23, 2006

[63] Osman, Jack W, 'The Finnish economic depression of the 1990s: Causes, consequences and cure,' (Scandinavian Review, 1998).

[64] Diarmaid Ferriter, "Ireland in the Twentieth Century", Government of Ireland, 2009, Essays, www.gov.ie.
[65] Total area: 70,273 sq. km. Population: 4,239,848 (2006 census); 4.4 million (2008 Population Estimates).
[66] The Economy and Value Research Center, 'National Competitiveness Report Armenia 2008', p. 16; reference: Frederick Millan, B. ARCH (HONS) M.A. MRTPI. RIBA, 'Can Small Countries Compete in the Global Economy? – Insights from Irish Experience.'

The high productivity growth of Ireland's 'new economy' in the 1990s was not least the result of progress in the Information and Communications Technology (ICT) sector, bringing about a higher potential output growth rate, lower unemployment, higher productivity growth and improved living standards.[67]

On the other hand, Finland, a country comparable to Armenia at least by the size of the population and some similar economic characteristics in the past, such as outward migration, large dependence on the exploitation of natural resources and others, is also one of the best examples of technological transformation that has given the country a competitive edge in the 1990s. It took the country with a relatively small population only a decade to go from being one of the least ICT specialized countries to becoming the single most specialized one, with telecommunications giant Nokia as its locomotive.[68]

At present, both Finland and Ireland are pretty high on the table of economically competitive nations. Remarkably, only a few years ago Finland topped the rankings for three consecutive years (2003-2005) outdoing the U.S. and other leading economies of the world according to the competitiveness index.[69]

While there are obvious differences between the geographic, geopolitical, political and economic conditions at the start of the 'breakthrough' between Armenia and the above-mentioned two countries, their examples have been shown to clearly demonstrate that a small size and disadvantaged starting positions are surmountable obstacles in climbing the 'competitiveness ladder'.

As far as the competitiveness scale is concerned, it should be said, however, that comparisons between nations on their competitive scales according to the GCI are usually unproductive or barely productive unless these nations compete according to their peer groups.

Unlike Finland and Ireland, Armenia, along with most other newly independent nations of the post-Communist bloc, is in the bottom group of nations according to the stage of their development.

Finland and Ireland, both members of the European Union, might belong to a different 'league' now, but both are useful example for Armenia, as 'role models' rather than 'real comparators', to see how they developed over time and what helped these nations pull themselves up into the top division.

A small industrialized country[70] with a standard of living ranked among the top twenty in the world, Finland was, at the beginning of the 20th century, a poor agrarian country with a

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[67] Geraldine Slevin, "Is There A 'New Economy' in Ireland?", Central Bank of Ireland, Technical Paper, June 2002.
[68] P Rouvinen, P Ylä-Anttila, 'Little Finland's Transformation to a Wireless Giant', (Research Institute of the Finnish Economy, 2004).

[69] Currently, Finland is N6 and Ireland is N22 (Source: GCR 2008-2009)
[70] Finland's population is estimated to be 5.3 million (according to 2008 data)

GDP per capita less than half of that of the UK and the U.S., world leaders at the time in this respect.[71]

Deprived of vast natural resources, Finland had relied on large forest reserves as the main driver of its trade.

Fred Singleton calls it 'remarkable' that "the expansion of the economy of this small country situated away from the main routes of world trade and lacking many of the sources of fuel and raw materials necessary for modern industry has been export-led."[72]

But the success of the Finnish economy during the period from the 1960s to the 1980s was arguably not sustainable.

In a similar way to Armenia, Finland enjoyed prosperity largely due to the forest industry but had its worst depression in the postwar period between 1990 and 1993. Then, its GDP shrank by more than 10%, while unemployment soared from 3.2% in 1990 to 15.4% in 1995. In addition, the share of exports of GDP, which had already declined during the 1980s, dropped to 22% from its peak of 33% in 1981.[73]

One of the factors that naturally contributed to the crisis of the 1990s was the collapse of the Soviet Union – Finland's biggest trade partner in timber and related industries as well as supplier of fuel. (This to some extent resembles the loss of markets and trade links suffered by Armenia in the period after the disintegration of the Soviet Union in 1991).

Since then Finland has undergone tremendous change becoming an economy conducive to sustainable development.

In a recent piece of research, Gerd Schienstock refers to Finland as proof that 'despite the main assumption of evolutionary economics that techno-economic change is path dependent, suggesting some kind of gradual development, Finland demonstrated that countries can undergo fundamental transformation processes within a relatively short period of time.'[74]

The rapid transformation of Finland during the 1990s is characterized as a change from a natural resource-intensive to a knowledge-based economy.

Schienstock shows that the cluster of Finnish companies involved in the forest industry had concentrated more on exploiting existing technological knowledge than on exploring new knowledge, which, he argues, 'can lock the economy of a country into an inferior option of development and may in the long run result in a loss of competitiveness and in a retarding economic growth.'[75]

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[71] Riitta Hjerppe, 'An Economic History of Finland', University of Helsinki, EH.Net Encyclopedia
[72] Fred Singleton, 'The Economy of Finland in the Twentieth Century', (University of Bradford, 1986). p. 156

[73] Source: Economic statistical reviews for Finland for 1990-1993.
[74] Gerd Schienstock, 'From Path Dependency to Path Creation: Finland on its Way to the Knowledge-Based Economy', (Current Sociology, SAGE, 2007), p. 93

[75] Schienstock, p. 94

Finland experienced an impressive recovery when it switched to a new development path based on the knowledge-intensive ICT cluster. The share of electronics and electrical equipment of total exports grew from 10 to 29 percent in 1999, outperforming the paper industry, which had for decades dominated Finnish exports. In addition, the ICT cluster showed growth rates of up to 25% each year with the telecommunications industry growing by 35%, while the paper industry grew by only 1.6%. Within a few years, Finland became the world's most specialized country in telecommunications. Also, the employment rate improved to about 68% in 2003 with the highest growth rate in the ICT cluster. Unemployment, on the other hand, dropped to about 9%, which is below the European average.[76]

Schienstock suggests that the competitiveness of the Finnish ICT cluster is due to several factors, including: corporate specialization in telecommunications, the core company as a key global player and a network of SMEs closely cooperating with the core company, high R&D investments and close science-industry cooperation, techno-organizational modernization, a highly educated workforce and a focus on firm-centered innovation policy.

Remarkable was the role of the government in this transformation. The Finnish government had changed its policy orientation from an investment-oriented, short-term macroeconomic policy into an innovation-oriented, long-term microeconomic policy. Finland was actually the first among the OECD countries to adopt the concept of 'national systems of innovation' as the basis of its policy, stressing the importance of a systemic transformation process.

The application of a 'national system of innovation' as a model of economic development stressing the interrelationship between various actors involved in innovation processes required a closer link between the science system and the economy to enable intensive knowledge flows, which also triggered major restructuring processes within the science system.

Another classic example of a relatively quick and effective transformation often cited by researchers is Ireland. This country was suffering from a poor performance of indigenous industry, high unemployment and migration rates but managed to overcome its lack of competitiveness and eventually rise to a qualitatively new level through a gradual opening of its economy to trade and direct foreign investments which later was shored up with the application of new technologies.[77]

Ireland saw quite strong industrial growth in the 1960s and 1970s, but native Irish-owned industry was not successful in developing exports, while at the same time it was quite rapidly losing domestic market share to competing imports as the protectionist measures employed in the 1930s-1950s were dismantled. In this context, there was no employment growth in indigenous industry between the mid-1960s and the end of the 1970s. Then in the period 1980-1988 its employment fell sharply by 22%, as a result of continuing heavy dependence on the domestic market, a continuing rise in competing imports, and a much

[76] Schienstock, p. 99

[77] Kieran Kennedy, 'The Irish Economy Transformed', (Studies @ www.studiesirishreview.ie 1998)

weaker trend in domestic demand. Thus, until the mid-1980s, indigenous industry had a poor competitive record under free trade conditions.[78]

The ‘Celtic tiger’ emerged, however, when Ireland began to invest in education and R&D infrastructure in the 1980s, followed by drastic policy changes beginning in 1987. To complement its top-down policies, Ireland instituted pragmatic bottom-up programs -- regional partnerships to mitigate high unemployment and a program to expand national supplier linkages from FDI.[79]

Ireland’s current economy (also benefiting from EU membership) can be described as modern and trade-dependent with growth averaging 7% per annum in 1995-2007.[80]

Advances in science and technology have had a significant impact on virtually all aspects of Irish society and economy and have, compared with growth in domestic services, underpinned much of the increased prosperity of recent years. Ireland is a leading exporter of high-tech products[81] and services for global markets and, through developments in information and communications technologies, is also a major hub for global electronic commerce and knowledge-based activity (with computer giant Dell as the flagship company).[82]

Under the Irish Action Plan for promoting investment in R&D until 2010, to achieve excellence in research and development Ireland expects to have business investment in R&D reaching €2.5 billion (or 1.7% of GNP) by 2010.

Ireland and Finland are good examples for a long-term vision, as is Estonia[83], which achieved its breakthrough not least due to an innovation approach and currently enjoys an EU member status.

Estonia, which joined the EU in 2004, has made rather good progress in step-by-step launching of different innovation programs.

Since 2000 the innovation policy implementation in Estonia has been centered on the support in high-tech start-ups (university spin-offs) and R&D capable businesses. In 2004 the fostering of long-term cooperation between enterprise and research sectors became active with the launching of the Competence Centres Programme. In 2005 the focus expanded to a wider range of enterprises and infrastructure development. The Innoawareness programme and the pilot of an Innovation Audit programme both have been focused on increasing the innovation awareness among a wider range of enterprises rather than only high-tech companies. The other focus of innovation policy in Estonia is

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[78] Paula Clancy, et. al. ‘Industry Clusters in Ireland: An Application of Porter’s Model of National Competitive Advantage to Three Sectors’, European Planning Studies, Vol. 9, No. 1, 2001, p. 8
[79] Paula Clancy, et. al.

[80] Irish industry accounts for 46 per cent of GDP, about 80 per cent of exports, and employs 29 per cent of the labour force. Ireland has the second highest per capita income of any country in the EU next to Luxembourg, and fourth highest in the world based on measurements of GDP per capita. (Paula Clancy, et. al.)

[81] At one time, Ireland produced more silicon chips than Silicon Valley (Source: BBC Radio 4, 21/02/2009).
[82] Building Ireland’s Knowledge Economy, ‘The Irish Action Plan For Promoting Investment in R&D to 2010’
[83] A peer Soviet republic not so long ago comparable to Armenia in size and population.

infrastructure development. The R&D infrastructure development programme was launched in Estonia in early 2005.[84]

Several other equally important factors have contributed to the transformation of especially the Finnish and Irish economies.

First, especially in the case of Finland, was the development of a corporate culture with strong leadership, especially in Nokia; since there was little corruption and strong rule of law, the main leaders were able to push through their vision and changes, reward themselves substantially and train up a wider cadre of managers, says John Lloyd, Director of Journalism at RISJ in Oxford and a contributing editor to the Financial Times.

He adds: "In Ireland, a new entrepreneurial class began to appear in the 60s: and the success of companies like Ryanair and Independent Media reflect that, and the careers in the UK and the US of Irish business people like Chris Haskins are also testimony to that: Ireland had a tiny senior business class for much of the post-independence period, and business was heavily regulated and state dominated, as well as being culturally suspect."

Second, in Mr Lloyd's view, the importance of being within the Scandinavian area for Finland and of having the UK as a neighbour for Ireland were very large. "It meant no conflicts (the terrorist campaign in Northern Ireland is a partial exception, but it didn't really affect the Irish take-off); markets – especially for Ireland, in the UK; examples; and investment."

(Estonia, in turn, hugely benefited from Scandinavian, especially Swedish, assistance; a European tradition, albeit weakened; and a strong link with Finland, with mutually comprehensible languages.)

Mr. Lloyd, who also has been East European Editor and Moscow Bureau Chief for the FT, says Armenia has a big neighbour (i.e. Russia) which "doesn't practice the rule of law in business, has invaded Georgia and has still a quasi-colonial attitude to the CIS (or a majority of post-Soviet states)."

Still, one common feature of all relatively small-sized economies that managed to achieve a high degree of transformation is that they all paid great attention to knowledge and innovation. And while Armenia may be classed as a country that needs to work on its efficiency now, moving towards a benchmark can only help achieve the goal sooner. Therefore, the current research (as seen in the following chapter) suggests dwelling on a long-term vision for Armenia's competitiveness based primarily on science, knowledge and sophistication.[85]

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[84] Estonia: Annual Country Reports. Pro Inno Europe, http://www.proinno-europe.eu

[85] Author: Like all major economies in the world, Ireland and Finland have also felt the adverse effects of the continuing global economic crisis. Despite a considerable body of pessimistic or skeptical views about the future outlook of these economies, as well as the economies of such new EU member states as Estonia, Latvia, Lithuania and others, it is at the same time understood that in many ways the time of crisis is a test for how competitive and sustainable these nations' economies are.

CHAPTER IV.

Room for improvement.

> "Some people do not realize that a knowledge-driven economy affects them: they think it is only about the new creative industries and their further reaches of high-tech business, and not relevant to traditional manufacturing and services. This is a fundamental misunderstanding of the coming reality…"[86]

[86] Abstract from the report: 'Our Competitive Future: Building the Knowledge-driven Economy'. Presented to Parliament by the [British] Secretary for Trade and Industry by Command of Her Majesty, London, December 1998.

Throughout history nations have competed in various fields to be stronger and better and eventually more prosperous.

Innovation (such as in technology and forms of organization[87]) is often singled out as a factor which plays a central role in the competitiveness and long-term economic prosperity of nations at the current stage of their development.

The history of advanced nations in the last century and a half can be conventionally divided into several periods according to factors influencing prosperity:

- (1840s-1890s) the age of steam power and railways;
- (1890s-1940s) the age of electricity and steel;
- (1940s-1990s) the age of mass production (Fordism);
- (1990s –present) the age of microelectronics and computer networks.[88]

The high-tech age as many call it is not restricted to information technologies or data transmission as is believed by many.

The information age implies that while it has become easier to acquire, store and transmit data through information highways and digital networks, it also requires more effort on research and development to sustain and advance the existing technologies. This also implies such new challenges as lifetime education and training to keep up with the pace of technological change. (Example: Singapore)[89]

It is argued that globalization acts as an accelerator of the demand for higher value-added goods and services created by more sophisticated, more discerning, and better educated consumers and businesses – the main drivers of a knowledge economy.[90]

Technological advancement has been a key to success in many economies which are currently believed to be knowledge-based or science-intensive, including the present-day Finnish and Irish economies.

According to Krugman, economic expansion represents the sum of two sources of growth: increases in 'inputs' and increases in the output per unit of input. Regarding the latter, he writes: "Such increases may result from better management or better economic policy, but in the long run are primarily due to increases in knowledge."[91]

The need to develop a more knowledge-based and knowledge-driven economy has been emphasized by the government of Armenia for many years as the only possible way forward for the country lacking vast natural resources to exploit. However, Armenia's

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[87] Marcela Miozzo and Vivien Walsh, 'International Competitiveness and Technological Change' (Oxford University Press, Inc., New York, 2006), p 1
[88] Miozzo and Walsh, 2006.
[89] Paul Krugman, 'Asia Rising or Falling?', Foreign Affairs Reader, (USA: Council on Foreign Relations, 1994) p. 10
[90] Ian Brinkley, 'The Knowledge Economy: How Knowledge is Reshaping the Economic Life of Nations', (The Work Foundation, March 2008) p. 5
[91] Paul Krugman, 'Asia Rising or Falling?', Foreign Affairs Reader, (USA: Council on Foreign Relations, 1994) p. 6

performance in scientific and applied research (or R&D) and innovation has remained poor since independence. Moreover, it is the ability to turn knowledge into new commercially valuable products and services that determines a truly successful knowledge-based economy.

Armenia was a major hub for science, research and high-tech production in the former USSR, with 25,000 scientists and engineers in 1990. In the mid-2000s the number of scientists in Armenia had reduced by more than four times and most of those specialists were involved in international research projects.[92]

Until recent times innovation did not sufficiently feature on the government policy agenda and no sufficient incentives were provided to promote R&D and cooperation between the private sector and science institutions.

In December 2000, the Armenian Parliament adopted the Law on Scientific and Technological Activity aimed at regulating interrelations between R&D performers, state bodies and R&D outcome consumers as well as outlining general principles for the formation and implementation of state policy in the field of scientific technology (S&T). To improve policy-making and achieve better coordination in the field of S&T, in October 2007 the government made a decision to set up the State Committee of Science which was empowered to execute an integrated S&T policy in the country.[93]

But even now research and innovation attracts insufficient state funding to be able to show any major performance. The 2009 state budget allocates for education as a whole 126.9b AMD (approx. US$ 416m), which is about 13% of the whole state budget. However, only 8.3b AMD or 0.85% of the whole state budget is earmarked for science and research proper.[94] (No precise data is available on investments by private sector companies into the sphere of R&D and innovation.)

The experience of other nations described in the previous chapter clearly demonstrates that even a small nation like Armenia can find its place on the world's economic map by virtue of developing a fundamentally new knowledge-based environment with emphasis put on education, science and R&D.

Yet, as Porter suggests, "each nation faces its own unique set of issues as well as its own opportunities and constraints in dealing with them."[95]

Porter's famous model for competitiveness, or the so-called 'diamond', represents a competitive environment faced by firms. But it is also suitable for use by governments to improve the national platform for competitiveness. The elements of the diamond include:

- Demand conditions;
- Factor conditions;
- Strategy, structure, and rivalry within industries;
- The cluster of related and supporting industries;

[92] Karen Arzumanyan, the article, "How to Attract Multinational Corporations?", 2006
[93] Republic of Armenia Government Decree, 18 October, 2007, 1269-N (Source: Official government website: www.gov.am)
[94] Republic of Armenia Law on the 2009 State Budget, adopted 27 November 2008; (Source: www.gov.am)
[95] Michael E. Porter, 'The Competitive Advantage of Nations', (The Free Press, New York, 1998), p. 733

• The influence of government (and sometimes chance events) on the above.[96]

While classical theories propose that comparative advantage resides in the so-called factor endowments, such as land, natural resources, labor and the size of the local population, Porter argued that a nation can create new advanced factor endowments, e.g. skilled labor, a strong technology, knowledge, etc..

Among the ingredients leading to a national comparative advantage Porter also mentions 'pressure on companies to innovate and invest'.

Paradoxically, according to Porter, local disadvantages in factors of production, such as labor shortages or scarce raw materials, force innovation and new methods, leading to a national comparative advantage. Equally, local rivalry also puts pressure on firms to innovate and improve.

It is crucial in understanding this theory that Porter's diamond works as a system and the effect of one point depends on the other. Example: factor disadvantages will not lead firms to innovate unless there is sufficient rivalry.

It is worth mentioning here that Armenia ranks very low (only 132nd among 134 covered nations) according to 'Intensity of Local Competition' and 'Effectiveness of Antimonopoly Policy' in the 2008-2009 GCR.

Additional perspectives on the 'competitiveness diamond' suggest that the need for innovation generates at the 'top' of the diamond, since competitive businesses and industries are good at understanding customer needs, and innovating to continually provide more value to the customer. As a direct result of this, through constant improvements in strategies, the best businesses are able to continually increase their productivity, hence their competitiveness. Companies with resource-driven strategies tend to focus on factors of production, particularly costs. They compete and invest at the 'bottom' of the diamond, and continually lose position vis-à-vis customer-oriented companies. Worse, governments in search of job creation or otherwise adopting old models of economic development, also tend to invest in the low end of the diamond, e.g. attracting labor-intensive investment.[97]

This competitiveness paradigm shows that in order to make sizeable gains in competitiveness, businesses and supporting government action in the microenvironment need to strive for the 'top' of the diamond.

Porter, nevertheless, assigns a role to the state in promoting company sophistication. He writes: "Stimulating improvements in science and technology is a widely acknowledged role of government. Research and development cannot be left solely to firms because the benefits to the national economy exceed those to individual firms due to spillovers."[98]

The role of the government in the model can be summarized to the following:

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[96] M. E. Porter, 1998, p.71-126

[97] (Source: 'Armenia Competitiveness Assessment', Final Report, Submitted By Nathan Associates Inc. J.E. Austin Associates Inc. to USAID/Yerevan, 2004.

[98] Michael E. Porter, 'The Competitive Advantage of Nations', (First Free Press Edition, New York, 1990), p. 631

- Encourage companies to raise their performance, e.g. by enforcing strict product standards.
- Stimulate early demand for advanced products.
- Focus on specialized factor creation.
- Stimulate local rivalry by limiting direct cooperation and enforcing anti-trust regulations.

However, Porter warns that in the case of developing countries, ‘demand conditions’ are generally not advanced. He argues that sophisticated demand conditions do not become an advantage until the third, innovation-driven stage of development.

Porter also makes a strong case for clusters. While he says that clusters often emerge and begin to grow naturally (such as Silicon Valley or the concentration of mechanical firms around Modena, Italy), he also argues that ‘government policy has an important role in nurturing and reinforcing clusters once a cluster begins to form.’[99] The best suggested way for governments to do that, according to Porter, is through investments to create specialized factors, such as university technical institutes, training centers, data banks and specialized infrastructure.

In a recent research on Armenia’s economy entitled ‘The Caucasian Tiger[100]: Sustaining Economic Growth in Armenia’[101] the authors dwell on a knowledge-based economy model as a way forward for Armenia.

They define a knowledge-based economy as one where ‘organizations and people acquire, create, disseminate and use knowledge more effectively for greater economic and social development.’ This requires the following:

- An economic and institutional regime that provides incentives for the efficient creation, dissemination, and use of existing knowledge.
- An educated and skilled population that can create and use knowledge.
- A system of research centers, universities, think-tanks, consultants, firms and other organizations that can tap into the growing stock of global knowledge, and assimilate and adapt it to local needs.
- A dynamic information infrastructure that can facilitate the effective communication, dissemination, and processing of information.[102]

And so, what are the few main obvious sources for knowledge for Armenia?

According to the same authors, Armenia is distinctive in having the following basic qualifications:

- **An intense flow of energetic, motivated individuals** who value knowledge and higher education.[103]

[99] Michael E. Porter, p. 655
[100] In a 2006 report, the World Bank termed Armenia a ‘Caucasian Tiger’ due to its high growth rates.
[101] Saumya Mitra, Douglas Andrew, Bartek Kaminski, ‘The Caucasian Tiger: Sustaining Economic Growth in Armenia’, World Bank, 2006.
[102] Saumya Mitra, et al., World Bank, ‘The Caucasian Tiger’ (Volume 1, Policies to Sustain Growth), 2006; p. 88

- **A large stock of highly educated people** (yet with largely obsolete specialized skills.)[104]
- **A large and entrepreneurial Diaspora.**

  On the downside are:

- **Weak local entrepreneurship.** *(Clusters and value chains are not developing… Entrepreneurs and policymakers alike do not appreciate (and hence do not seek to improve) the value of **intangibles** such as brand names, business reputations, marketing and managerial skills, networks, etc.).*

- **Fragmentation of the policy debate**. *(Traditions of collective action and public-private partnerships are also weak).*

Due to its diversity and well-established nature, the worldwide Armenian Diaspora represents one single biggest source of knowledge and potential for creating knowledge. With the availability of a clear strategy and formulated action, the Diaspora may prove a considerable source for investment into R&D in Armenia just as it is now indispensable for such science-intensive spheres as IT in facilitating contracts, connections and business partnerships in the U.S. and Europe.[105]

At present, the Armenian government has a sense of the mammoth tasks it is facing and is declaring its readiness to implement various projects to take the country further to the technological stage of development.

Education reforms, including accession to the Bologna process[106], a presidential foundation for scholarships to students who manage to get into the world's leading colleges[107], prioritizing the IT sphere on the state level[108] and appreciation of the need for switching to e-government create a good basis for further steps towards achieving the goals of transformation.[109]

Given the huge importance of the government role in creating proper conditions for private sector company development, it is safe to say that the strategic choices made by Armenia's state executives largely determine the outcomes for businesses and enterprises involved in

[103] This point has been repeatedly emphasized by the Armenian president and prime ministers in public speeches during the past year.
[104] The authors of 'The Caucasian Tiger' point out that in the former USSR Armenia specialized in R&D and argue that Armenia still boasts a critical mass of human capital that sustains a culture that values knowledge.
[105] National Research Council (U.S.) Committee on Science and Technology in Armenia, 'Science and Technology in Armenia: Toward a Knowledge-based Economy', (National Academic Press, 2004)
[106] The purpose of the Bologna process (or Bologna accords) is to create the European higher education area by making academic degree standards and quality assurance standards more comparable and compatible throughout Europe.
[107] Vahan Ishkhanyan, 'Bright Idea: Government creates "Light" foundation to encourage foreign study', ArmeniaNow online weekly, 26 September, 2008.
[108] Armenia is the only country in the region that exports IT products with 30% growth per annum (Source: the Armenian Ministry of Economy, WTO: www.arm-wto.am; Armenia became a full member of the World Trade Organization in 2003)
[109] According to the 2007-2008 Global Information Technology Report of the World Economic Forum, Armenia is 106th among 127 covered nations by the so-called 'Network Readiness Index', behind almost all comparator regional neighbors.

operations within Armenia and those with potential interest in Armenia currently operating outside.

The law recently enacted by the president of Armenia on the establishment of an all-Armenian bank fits into this pattern of choices. The main declared goal of the bank is rendering assistance to the strengthening of the Diaspora potential based on knowledge and competition that should be entirely aimed at increasing the competitiveness of the whole Armenian nation at the international market. The Bank will operate outside Armenia and finance projects submitted by representatives of the Armenian Diaspora.[110]

Roads, internetization, better telecommunications infrastructure and quality of service, re-skilling of personnel in key sectors remain priorities for Armenia in achieving far-reaching goals of competitiveness.

Armenia is currently on the way of contracting more foreign debts, mainly in the form of stabilization loans from Russia, the World Bank, China, and others.[111] With all the risks involved[112], it also offers a good opportunity to channel the money into 'good business projects', including stimulation of small and medium-sized enterprises – a widely declared goal of the government.

The recently effected switch to the new preferential GSP+ (General System of Preferences Plus) regime (including 16 countries) enables Armenian producers to export a large number of names of products to European Union markets. The regime is effective until 2011 and is expected to encourage trade of 'Made in Armenia' goods to the EU.[113]

This also offers an area of interest for investors and may generate a new government approach to the stimulation of local manufacturing.[114]

In the case of Armenia, any talk of building a more competitive economy inevitably leads to the discussion of the current state of the country's involvement in regional cooperation.

With the lack of diplomatic relations with two of its four neighbors, Armenia experiences isolation from the bulk of regional trade and projects of potential benefit to its economy.

The current administration shows a high degree of understanding that a 'regional détente' will lead to greater regional cooperation and trade. Also, settlement of interstate relations will in the long run help diversify interstate transport infrastructure (in addition to such plans as building an Iran-Armenia railway[115]) and especially energy and fuel supply routes.

Opening the border with Turkey and a prospect of Turkey's further integration with the European Union may in the long run improve Armenia's chances of better access to

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[110] Regnum.ru news agency report, 19.01.2009

[111] Sara Khojoyan, 'Cautious Relief: Experts cite dangers of Armenia's foreign bailout', ArmeniaNow online weekly, 13 February, 2009.

[112] Armenia's gross foreign debt as of late September 2008 made 3 bln 176.55 mln USD; Noyan Tapan, 09.01.2009 (Source of reference: National Statistical Service of Armenia, ArmStat).

[113] Regnum.ru, 'Armenian Producers Start Export of Goods to EU Under GSP+ Regime', 30.01.2009.

[114] Emil Danielyan, 'Armenian Importers Urged to Switch to Manufacturing', RFE/RL, ArmeniaLiberty.org, 9 February, 2009.

[115] Marina Grigoryan, 'Silk Road on Rails?: Armenia-Iran Railway Gaining Speed – At Least in Debate', ArmeniaNow online weekly, 30 January, 2009.

European markets.[116] It is at this (currently hypothetical) stage that the competitiveness of Armenian firms will get its first major trial.

It is argued that while some economic sectors in Armenia may suffer because of the re-opening of the border with Turkey, in general it will beneficial to Armenia's economy and society.[117]

CONCLUSIONS

We started with the presentation of Armenia's current positions according to the Global Competitiveness Index highlighting some strengths and weaknesses of the nation in terms of its competitiveness.

Over the past several years Armenia has made little progress in the rankings, which brings about the need for a strategy to close the gap with competitor markets in the region and on a more global scale.

While there is a certain degree of skepticism about how objective and correct the Global Competitive Report and its index and other similar studies are, it is obvious that Armenia must try and improve on the rankings, because in the final analysis it is reports like these that, apart from other things, give countries better credibility and attractiveness in the international arena. In other words, moving towards enhancing competitiveness that is correspondingly reflected in the country's internationally rated standing is killing two birds with one stone.

In this paper we have established that the economic competitiveness of a nation is affected, to some extent, by its path (past?) and numerous constraints in the present. While it is true that every nation has to explore its own way to prosperity, it is also beyond doubt that future progress and therefore the degree of competitiveness depend on a series of strategic choices to be made by societies and their governments.

We have arrived at the conclusion that competitiveness and increasing efficiency and productivity are necessary for Armenia especially at this period of its development. The continuing global economic crisis has slowed down Armenia's economic growth hitherto

[116] Opened borders and good relations with neighbours is a major requirement for Turkey's successful bid for entry to the European Union.
[117] Nathalie Tocci, 'The Case for Opening the Turkish-Armenian Border', Trans European Policy Studies Association, July 2007.

mainly driven by Diaspora investments into construction and services and migrant worker remittances that kept consumption on a fairly high level.

This is yet another signal for the government to start realizing in earnest its long-declared goals of converting to a knowledge-driven and knowledge-based economy in which science-intensive sectors become priorities.

Competitiveness, as has been shown, is not only about market size or vast resources and riches at a country's disposal. It is in equal measure how the country makes the best use of what it potentially has.

For Armenia, which lacks vast natural resources and therefore cannot offset its low labor productivity with relatively cheaper exploitation of natural resources, moving towards a more knowledge-driven economy appears to be a natural choice. IT is one of the spheres where Armenia may prove competitive on the global scale and in which it may strive for 'uniqueness' in the long run.

Putting the country on a more technological footing, however, requires government and private investment in science and research for the purpose of increasing the efficiency of output for production and increasing labor productivity in the medium term. This represents a particular area where the accumulated potential of the Diaspora may become indispensable both in terms of existing knowledge and expertise and Diaspora investment in future R&D.

But the potential for further advancement is likely to be sought in generating further interest in information technologies and emerging innovations as well as stimulating a local search for progressive ideas of upgrading production. Establishing a solid link between education, science and production is equally vital in this sense.

Porter's diamond model implies that the government can encourage innovation in the private sector by raising quality standards and improving quality control, leading to better company sophistication and eventually competitiveness of domestic firms on the regional and world levels.

A transformation into a regional powerhouse of 'knowledge' is impossible without investments into education, modernization of infrastructure, such as roads, communications, internet access, as well as conducting foreign policies to the benefit of better regional cooperation and trade and better access to international markets.

A further improvement of democratization, a genuine separation of the branches of power supported by sustained practice, a drastic improvement in the standards of holding elections and other democratic and institutional reforms are essential in providing an environment for businesses that is secure and immune to political upheavals and therefore conducive for longer-term planning and investment. A better practice of legislation, better state governance and administration and action against corruption are equally essential, as is stimulation of local production needed in the medium-term to create opportunities for Armenia to compete with neighbors in the region.

The talk about the need to curb further emigration proved almost unnecessary when the economic crisis of late 2008 – early 2009 meant that a considerable portion of such workers might actually return. It turned out that the government would rather see them continuing to work outside and wiring money back home on a regular basis.

The government has failed to use the period of relative stability and growth to create conditions for once ‘exported labor force’ to expect and therefore seek decent jobs domestically.

The prospect of a gradual resolution of geopolitical tangles implies that Armenia is likely to re-rally its diasporas around focal issues of building up the country to become home to all Armenians, not only in word, but also in deed. The homecoming of ‘new’ Diasporas may serve more purposes than one – including the purpose of providing a better cohesion in society.

Overall, competitiveness is a multi-dimensional phenomenon that cannot be downsized to several dozen pages and requires constantly updated research to understand what particular aspects of policies can have the maximum effect on improved competitiveness for a given nation at a given period of time.

The constantly ongoing ‘competitiveness’ contest will only intensify once the world comes out of the current downturn and therefore it is of vital importance for Armenia to gain steadier ground before the major runners quicken their pace again.

With the rapid course of developments in the South Caucasus region (such as fence-mending diplomacy or emergence of new dividing lines) proceeding against the backdrop of a major global economic recession, it is clear that time is running out for Armenia to make major decisions regarding its future strategic choices.

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