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Exchange Rate and
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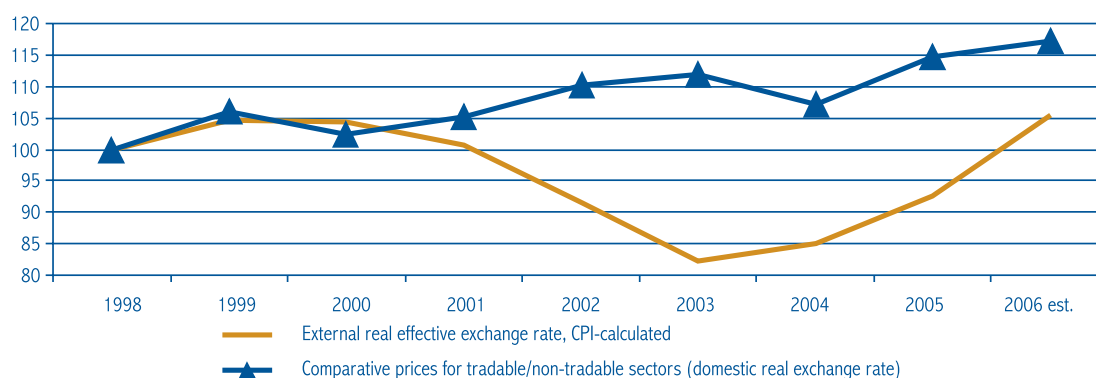# Real and Equilibrium Real Exchange Rates in Armenia[1]

Vardan Aramyan

The real exchange rate is of high importance to any country. It is important because of the three functions it performs. First, the real exchange rate is the major price determinant of a country's competitiveness and determines the structure of production and consumption. Second, it reflects the speed of convergence of a given country towards developed countries. Third, it ensures the domestic and external balancing of the economy.

When interpreting the behavior of the real exchange rate, the issue is addressed in two dimensions. First, the question is whether the appreciation of the real exchange rate does not result in a loss of a country's competitiveness. Second, it examines whether real appreciation is affected by the behavior of fundamental economic indicators or only as a short-term phenomenon reacting to short-term shocks from policy-makers that will eventually lead the economy into a crisis. In other words, the policy-makers will only worsen the gap between the actual and real equilibrium exchange rates.

Let us discuss these questions with the example of Armenia.

Figure 1: Real Exchange Rates Behavior, 1998-2005 (upward trend of curve implies appreciation)

External real effective exchange rate, CPI-calculated

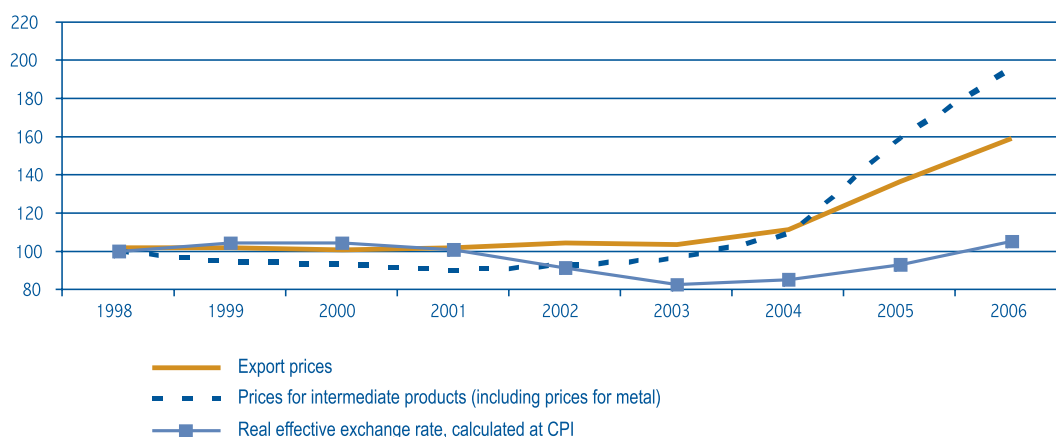Comparative prices for tradable/non-tradable sectors (domestic real exchange rate)

The real external exchange rate calculated on the basis of the CPI in Armenia depreciated until 2003, thus providing price competitiveness to Armenian exporters in external markets (see Figure 1). What concerns the domestic real exchange rate, however, is that it has been steadily appreciating since 2000, showing that the people in Armenia became wealthier each year. Exporters could afford to pay better salaries to attract laborers from the non-tradable sectors because the real exchange rate depreciated due to nominal exchange rate depreciation, ensuring excess profits to exporters. However, since 2004, when capital and financial inflows into the Armenian economy increased and accelerated, coupled with drastic improvements of trade terms in foreign markets in 2005 due to an increase in prices for metals in the international market, the real external exchange rate started appreciating. Some exporters (namely, metal exporters) were able to maintain their markets due to the increase in international prices (see Figure 2). Other exporters could only manage to survive if their productivity increased accordingly.

In order to substantiate this scenario, we cite the results of the CBA paper "Estimation of Ballassa-Samuelson in Armenia." Let us remind the reader that this effect was named for two famous economists-Ballassa and Samuelson-who first developed the concept. In the 1960s, when a number of countries were enjoying high economic growth rates while simultaneously suffering from permanent real

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[1] The issues discussed in this article base on the following papers on the real and real equilibrium exchange rates developed by the CBA: "Estimation of the real equilibrium exchange rates in Armenia with the 1-2-3 model" and "Estimation of Ballassa-Samuelson in Armenia". The named papers were prepared by Vahagn Grigoryan and Harutyun Sargsyan, macroeconomists of the External Economic Relations Division of the CBA Monetary Policy Department.

exchange rate appreciation, critics blamed the policy-makers that exports were losing their competitiveness. This was when Ballassa and Samuelson proved that the appreciation bears the effects of the comparative productivity growth of the tradable sector and, therefore, there is no need to worry.

Figure 2: Behavior of External Real Effective Exchange Rates and Export Prices, 1998-2006

Legend:
— Export prices
- - - Prices for intermediate products (including prices for metal)
—■— Real effective exchange rate, calculated at CPI

The results for Armenia show that this effect is quite weak as compared to a number of developing countries (see Table 1). Table 1 summarizes the comparison of the Ballassa-Samuelson Effect where the domestic price level is derived from the comparative prices of tradable and non-tradable sectors (domestic real exchange rate). Only 0.19 percentage points out of an annual average 2.3 percent price increase in Armenia is the result of the productivity growth. The balance is the consequence of the financial inflow and external inflation (described below.) In other words, our exporters did not take advantage of the opportunities during the depreciation period to upgrade production technologies and increase productivity. If Armenian export sectors have limited productivity growth rates then eventually structural changes in exports take place. The industries that enjoyed price competitiveness due to exchange rate depreciation yet unable to increase productivity (e.g., labor-intensive sectors that were once competitive due to low salaries and a depreciated exchange rate) will be gradually crowded out from their markets since the real exchange rate will appreciate along with economic development and enrichment of the society.

Table 1: Comparison of Ballassa-Samuelson Effect[2]

	Productivity Impact on Prices	Average Inflation Rate, 1999-2005
Armenia	0.19%	2.3%
Czech Republic	1.1-1.2%	2.5%
Estonia	2.2%	3.6%
Poland	3.6-4.2%	4.5%
Slovenia	2.1%	6.1%
Hungary	3.9-4.3%	7.0%

What concerns the real equilibrium exchange rate, if the actual exchange rate is different from the estimated equilibrium level, is that this may create large problems for countries. Under significant excessive appreciation, a country can face serious crisis due to an imbalance in external sectors, while excessive depreciation constrains domestic demand, consumption and investments. That is why it is crucial that

[2] Sinn and Reutter (2001)

policy-makers be aware of the real equilibrium exchange rate: it allows them to develop policies that avoid potential distortions and pressures in goods and foreign exchange markets.

The theory suggests different approaches to estimating the level of the real equilibrium exchange rate. The CBA has analyzed the situation based on some of those approaches to estimate the behavior of the real equilibrium exchange rate.

One of the approaches is the famous Devarajan, Lewis, Robinson[3] (DLR) model, or the so-called 1-2-3 model[4] . This general equilibrium model estimates the real equilibrium exchange rate by examining international inflation, foreign trade terms and capital flows. One of the positive sides of the DLR model is that it also accounts for the conditions of non-perfectly competitive markets. However, the shortcoming of this model is that it depends on which base year is used. The base year is supposed to be the year when the economy was in a steady state. The arguably chosen year of 2002 for Armenia has yielded the following results:

Table 2: DLR or 1-2-3 Model Applied to the Armenian Economy, 1999-2006

Year	International Price Increase	Impact of Trade Terms	Impact of Capital Flows	Equilibrium Dollar Prices	Actual Dollar Prices	Deviation (+ implies excessive appreciation)
	1	2	3	4	5	6
1999	-1.8	1.9	-7.8	-7.5	-5.0	-14.9
2000	0.3	-0.4	-5.6	-5.8	-1.6	-11.2
2001	0.3	0.5	-9.2	-8.4	0.3	-2.8
2002	3.2	-0.9	-7.0	-4.9	-2.2	0.0
2003	1.2	-2.4	-1.1	-2.7	3.7	6.6
2004	9.0	-1.3	-0.7	6.9	16.1	15.8
2005	14.0	9.1	-2.3	22.1	17.1	11.1
2006 est.	12.7	-2.7	11.8	21.5	12.9	3.2

The first three columns correspond to the three factors determining the equilibrium prices: international price increase, terms of trade and capital flows. If we assume that the economy will go back to its 2002 state (foreign trade prices will come back, capital flows will stop), then the current real equilibrium exchange rate is over-appreciated by 3.2 percent. The major deviation took place in 2003 and 2004, then it decreased (the real equilibrium exchange rate appreciated faster than the actual) mostly due to a combination of monetary sterilization and non-expansionary fiscal policies. If such policies are continued, the gap will most likely close. The results are interesting

Figure 3: Sensitivity of Base Year Choice

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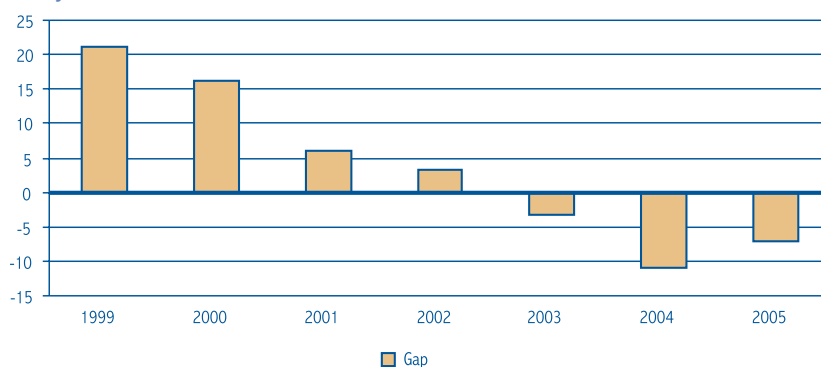
[3] Devarajan, S.; Lewis, I.D.; Robinson, S. "External Shocks, Purchasing Power Parity, and the Equilibrium Real Exchange Rate," The World Bank Economic Review v. 7, 1993, pp. 45-63.
[4] 1-Country, 2-Goods (tradable and non-tradable), 3-Activities (imports, exports, domestic production and consumption).

in that they show that the Armenian economy is quite sensitive and dependent on developments in the external world (internal price behavior). For example, 12.7 percentage points of the 21.5 percent increase in equilibrium dollar prices during from 2002 to 2006 occurred due to international price increases. At the same time, the appreciation of the 2005 real equilibrium exchange rate was assisted by an improvement in foreign trade terms, whereas the appreciation in 2006 was assisted by capital inflows.

However, it is worth mentioning that these results are heavily affected by the choice of 2002 as the base year. Therefore, if we believe that the financial inflows (that accelerated since the end of 2003) can be sustained in the future then 2003 or 2004 can be used as the base year. In this case, the real exchange rate in 2006 will be under-appreciated by almost 11 percent when compared to 2004 and by 3.2 percent when compared to 2003. During this exercise, international prices, capital flows and the terms of trade still show the general picture of their impact.

Conclusions

One can draw the following conclusions from this analysis.

- The trend of the real equilibrium exchange rate is towards appreciation. The results of estimations performed by the CBA with different approaches prove the same trend.
- Among the fundamental factors (productivity, capital flows, terms of trade) affecting the real equilibrium exchange rate, the impact of financial flows is very strong, while in some years drastic improvement in the terms of trade was very influential.
- The tradable sector of the Armenian economy gradually becomes less competitive as compared to the non-tradable sector; however, it remains competitive due to improved terms of trade. This is explained by the fact that the investments in the Armenian economy take place mostly in non-production sectors (investments mostly flow to the construction sector).
- In the long run, the Armenian economy may experience difficulties when the capital inflows stop or decrease, while the low significance of other fundamental factors, in particular, the relatively low increase in productivity, will not compensate for the drastic reduction in capital inflows.

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Box 1: Real and Real Equilibrium Exchange Rate

Real exchange rate is the ratio of the given country to counterpart countries' prices calculated on the basis of one currency.

Real equilibrium exchange rate, in the classical definition, is the value of the real exchange rate that corresponds to both domestic and external equilibrium at the same time under the given values of the fundamental variables determining those equilibriums. Nurkse (1945)

Let us present what real exchange rates exist and what we understand under fundamental variables of the economy.

It is a textbook statement that, for the assessment of competitiveness, two approaches to the real exchange rate are used: real domestic exchange rate and real external exchange rate. The real domestic exchange rate is calculated as the ratio of the prices in the tradable sector to the prices in the non-tradable sectors and it shows the incentives of the investors to put their money either into the tradable or the non-tradable sector.

The real external exchange rate is calculated as the ratio of the prices in the given country and its counterpart countries (in terms of the same currency) and shows the incentives for investors to put their money in the country or its counterpart countries.

The domestic real exchange rate appreciates when the prices in non-tradable sectors increase faster than in the tradable sector. Therefore, under similar productivity growth rates in the two sectors, the tradable sector loses competitiveness to the non-tradable sector. In other words, investing in the non-tradable sector becomes more attractive and the resources of the economy flow from tradable sectors to non-tradable sectors.

The real external exchange rate appreciates when the domestic prices in a country increase or the nominal exchange rate appreciates or a combination of the two occurs. In all cases, the dollar prices in the tradable sector of the given country increase. However, since a small country cannot dictate prices in the international marketplace and acts as a price-taker, the tradable sector of the case country is crowded out of the international market or is forced to decrease its profits, thus becoming less attractive for external investors.

Let us discuss the fundamental indicators of the real exchange rate. There are three of them: capital flows, terms of trade and comparative productivity growth[5]. If a country experiences capital inflows, both domestic and external real exchange rates appreciate. This occurs because, on one hand, the domestic demand is promoted and starts pressing on the prices of the non-tradable sector (the prices for tradable sectors are given by the international market). On the other hand, the large inflows trigger significant pressure on the nominal exchange rate towards appreciation.

Improvements in trade terms—faster increases in prices of exports over those of imports—allows for earning more net foreign exchange from units of exports compared to units of imports. This triggers appreciation of both domestic and external real exchange rates in the same manner as capital inflows.

The third and most important factor is the comparative growth of productivity of the tradable sector that results in the appreciation of the real exchange rate, according to the renown Ballassa-Samuelson effect.

When the real exchange rate appreciates due to capital or financial inflows without increases in productivity increase, the export sector undeniably gradually loses its competitiveness both domestically (in terms of attracting resources) and in external markets.

When the real exchange rate appreciates because of improvements in the terms of trade, the exporters temporarily may not lose competitiveness in external markets since exporters from competing countries benefit from the price increases in export markets. Therefore, competitiveness of exporters may be temporary.

When the real exchange rate appreciates due to comparative productivity growth (Ballassa-Samuelson effect), the exporters undeniably remain competitive since production costs decrease due to productivity growth, thus ensuring profitability.

Quantitative Estimations of Exchange Rate

Hayk Ghlijyan

Introduction

Exchange rate is one of the major factors of macroeconomic equilibrium in an economy. It is important not only because it defines the parameters of external trade, but also because of its impact on domestic production and consumption, investments, productivity, capital flows, interest rates and other economic indicators. These indicators, in turn, determine the direction of monetary and fiscal policies.

The real exchange rate shows the consumer basket price ratio in the given country and its trade counterparts, whereas the nominal exchange rate shows the monetary ratio of currencies. A number of theories exist to evaluate real and nominal exchange rates that enable calculations of market exchange rate deviations due to specific reasons.

In the long run, the real equilibrium exchange rate theories that explain the fundamental basis for changes in the real and nominal exchange rate, determined by the developments in the real sector, should be used. As for the short- and medium-term, quantitative estimation methodologies of the nominal exchange rate should be used.

The present article attempts to make quantitative estimations of factors affecting the nominal exchange rate since the hypothesis is that the appreciation of the Armenian dram (AMD) is mostly determined by nominal factors rather than by more fundamental factors of the real sector. There are two major reasons to refrain from estimating the real equilibrium exchange rate. First, the appreciation of the AMD took place during the past two to three years which is not sufficiently long enough to assume that the qualitative shifts in the economy caused the approximately 40 percent appreciation. The second reason is that, in the case of Armenia, it is difficult to insist on the fundamental assumptions of the theories estimating the real equilibrium exchange rate.

Theories to estimate the real exchange rate include the following:

1. **Purchasing Power Parity theory:** According to this theory, the long-run prices for goods are constant in all countries and so are the exchange rates. Therefore, no trade arbitrage may take place due to market forces. The major assumption of this theory is the existence of competitive markets and terms of free trade. The Purchasing Power Parity theory does not work. First, even if the prices of tradable goods are constant, the prices for non-tradable goods are not constant since labor and capital productivity levels vary from country to country. In the particular case of Armenia, this theory is not feasible since it is difficult to prove that competitive markets exist.

2. **External and Domestic Economic Equilibrium theory:** In an open market economy, the achievement of domestic and external equilibriums in the tradable and the non-tradable sectors are dependant on the domestic absorption (consumption plus government spending) and real exchange rates. According to this theory, the real exchange rate is variable and depends on the domestic absorption or consumption. In turn, absorption or consumption relies on the differences between the increases in prices of tradable and non-tradable markets. The tradable goods in this model are given (i.e., determined in the international market), whereas the prices for non-tradable goods are determined through domestic supply and demand. The basic assumption for achieving domestic and external equilibriums is that the labor market and markets for non-tradable goods under full employment are cleared. Due to increased domestic consumption, the prices for non-tradable goods increase on one hand, resulting in real appreciation. On the other hand, this results in an increase in imports and a deepening of current account deficits, which bring in real depreciation. Thus, under full employment, these forces result in the achievement of external and domestic equilibriums in tradable and non-tradable markets and a new level of the real exchange rate. For Armenia, this theory can hardly be substantiated since it is difficult to prove that the economy has achieved full employment. At the same time, it is difficult to insist that the labor market and non-tradable goods markets are cleared. (Rather, as a result of various economic shocks, these markets rapidly move to a new level of equilibrium.)

3. **Harold-Ballassa-Samuelson theory:** According to this theory, the relative productivity growth between the tradable and the non-tradable sectors over that of counterpart countries leads to increased wages in the tradable sector. Due to labor mobility, this then leads in increased wages in the non-tradable sector. Therefore, the wage level in the tradable and the non-tradable sectors converge. As a result of these higher wages, inflation rises and leads to appreciation of the real exchange rate. In fact, this theory rejects the Purchasing Power Parity theory. The basic assumptions of this theory

are: a competitive labor market, elastic prices, perfect labor mobility between tradable and non-tradable sectors, and a relatively equal distribution of the labor force between the tradable and the non-tradable sectors. In this theory, capital productivity is an exogenous variable and equals the marginal productivity of capital (i.e., real interest rates.) It assumes capital flows are liberalized and financial markets are integrated. On the other hand, the productivity growth in the tradable sector results in a decrease in output costs. This theory assumes that the impact of the increased wages on the prices of tradable goods is higher than the reduction of output costs due to increased productivity. The application of this theory to Armenia is difficult because the fundamental assumptions cannot be substantiated and the share of wages in the Armenian GDP is very low. Therefore, even if this theory does work, it cannot explain the large real appreciation.

Factors affecting the nominal exchange rate include the following:

1. According to the interest rate parity theory, the changes in domestic and external real interest rates may result in capital flows which do affect the nominal exchange rate.

2. Foreign exchange inflows (non-commercial and non-investment such as factor income and transfers that are mainly used for financing consumption), can affect the exchange rate.

3. The short-term exchange rate expectations trigger speculative effects in the economy and affect the domestic foreign exchange savings, which, in turn, affect the exchange rates.

For Armenia, the last two effects hold true: transfers grew while the domestic foreign exchange savings decreased.

Hypothesis for a quantitative estimation of factors affecting the exchange rate includes:

Based on the official statistical data, a supply-demand model is built from the balance of payments and the exchange rate policy of the Central Bank of Armenia (CBA). If the balance of payments reflects the real picture of foreign exchange flows, the equilibrium level of the exchange rate is determined by the proportion of supply and demand in the FOREX market. However, if the estimated level of the exchange rate does not correspond to the real level, then the balance of payments does not fully reflect all FOREX flows.

Possible Methodology Errors

The balance of payments does not allow for precise estimation of FOREX outflows and inflows; therefore, some approximations were performed. It is difficult to estimate:

- The currency and commodity structure of official transfers, direct and other investments;
- The savings-consumption proportions of factor income and transfers, as well as the breakdown per consumption and investments (in particular, real estate);
- The proportions of imports, exports and growth in inventory, as well as timing of sales;
- The profitability levels of imports in the domestic market and of exports in external markets; and
- The appreciation/depreciation of the AMD against other currencies (which is ignored in this case.)

Used Variables

All of the following variables were used on a quarterly basis (1996:1-2006:2), expressed in millions of U.S. dollars (USD).

- EE-end-of-period USD/AMD exchange rate,
- DSW-supply of USD excluding the factor income and transfers (exports, direct, net portfolio and net other investments),
- TR-factor income and current transfers,
- INT-FOREX interventions of the Central Bank, and
- DDN-demand for USD (imports excluding humanitarian assistance, factor income, current transfers and direct investments less a change in foreign reserves).

Models

- **ARIMA**-a model of **AR(1) I(2) MA(1,3)** time series which shows the correlation of the exchange rate from its historic levels (AR) and its residual error (MA), i.e. from the error of actual and estimated values. These variables mostly reflect the expectations of economic agents depending on the previous values of the variables and the deviation of their own expectations and the actual exchange rate.
  o Variables-end-of-period USD/AMD exchange rate.
- **OLS structural regression model** which shows the correlation of the exchange rate with the supply of dollars, transfers, demand for dollars, Central Bank interventions, as well as from its past values (AR) and residual error (MA).

  o Endogenous variables-exchange rate.

  o Exogenous variables-dollar supply excluding transfers, dollar demand and Central Bank foreign exchange interventions.

Results of ARIMA Model

$$D(D(EE)) = AR(1) - AR(3) - MA(1) + MA(3)$$

Or

$$D(D(EE)) = [AR(1)=0.257, AR(3)=-0.556, MA(1)= -0.864, MA(3)=0.521,]$$

According to this model, the exchange rate in the current period positively correlates with its past values, residual error (lagging three periods) and negatively correlates with its past values (lagging three periods) and residual error (lagging one period.)

Ex-Post Exchange Rate Projections of ARIMA Model

	Actual	Projections	Deviation
Q-1-2006	450.9	435.5	15.44
Q-2-2006	418.8	418.8	-0.02
Q-3-2006	381.5	411.4	-29.89

Ex-Ante Exchange Rate Projections of ARIMA Model

Q-4-2006	375.5
Q-1-2007	384.5
Q-2-2007	387.4
Q-3-2007	371.2
Q-4-2007	341.7

The projections under the ARIMA model show that the expectations of economic agents on depreciation were lower than the actual. In other words, the FOREX inflows were underestimated by economic agents as compared to their actual levels.

Results of OLS Model

$$D(D(EE)) = 0.27*D(DDN) - 0.42*D(TR) - 0.29*D(DSW) - 0.19*INT + [AR(3)=-0.64, MA(1)=-0.99, MA(3)=0.38]$$

All variables are statistically significant (t-statistics) and statistically important at 0.1 percent reliability, except for DDN and DSW. They are statistically significant at 9 percent of reliability. The probability of error in the equation (F-statistics) is 0.001 percent.

The coefficients of variables estimated through this model do correspond to the theory, i.e. the increase in the supply of dollars and transfers results in appreciation, whereas the increase in demand triggers depreciation. The Central Bank interventions to sterilize the USD result in appreciation, whereas steps to sterilize the AMD result in depreciation. The components AR and MA in the model reflect the estimates of the expectations in the economy.

Under the OLS model, ex-ante projections are not feasible as long as the exogenous variables are not assigned certain values. Therefore, the model allows only ex-post projections.

Ex-Post Structural Projections excluding AR and MA Components (i.e., ignoring the exchange rate expectations in the economy)

	Actual	Projections	Deviation
Q-3-2005	444.2	454.9	-10.7
Q-4-2005	450.2	451.7	-1.5
Q-1-2006	450.9	457.5	-6.6
Q-2-2006	418.8	455.0	-36.2

Ex-Post Structural Projections including AR and MA Components (i.e., including the exchange rate expectations in the economy)

	Actual	Projections	Deviation
Q-3-2005	444.2	454.3	-12.1
Q-4-2005	450.2	440.9	9.3
Q-1-2006	450.9	442.5	8.4
Q-2-2006	418.8	436.4	-17.6

The deviation between the two projections shows the impact of exchange rate expectations. The projections excluding the effect of expectations show that the exchange rate should be fluctuating in the range of AMD 452 to AMD 457 against the USD during the estimated period. However, adding the expectations component into the picture causes the AMD to appreciate. In this case, the expectations affect the FOREX savings by decreasing them. However, it is obvious that the expectations of the AMD appreciation were lower than the actual. Nonetheless, if the depreciation of the USD against other currencies is not taken into account, the projected exchange rate is very close to its actual rate.

Major Conclusions

- According to the OLS model, the supply of foreign exchange affects the change in the level of exchange rates rather than the demand for it.
- Increases/decreases in transfers have more impact on the exchange rate than other components of the FOREX supply (exports, investments, etc.).
- CBA interventions have less impact on the exchange rate than the market forces.

- Expectations have a significant impact on the exchange rate.
- Excess of supply over demand by USD 10 million results in appreciation of the AMD by 2.9 to 4.2, depending on whether it occurred because of an excess in supply or in transfers.
- Excess of demand over supply by USD 10 million results in a depreciation of the AMD by 2.7.
- CBA interventions of USD 10 million result in changes in the exchange rate of the AMD by 1.9.

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International Experience in Export Promotion

Karen Grigoryan

Introduction

Exports affect and are affected by long-term economic growth. Thus, because of the important role of exports, relevant promotion policies should be written to develop this sector. Today's export promotion programs often provide comprehensive and sophisticated services to the business community.

The Policy of Export Promotion

Most developing countries have an **export promotion organization (EPO)**: South Korea (KOTRA-Korea Trade Promotion Corporation), Thailand (Department of Export Promotion), Malaysia (MATRADE-Malaysia External Trade Development Corporation) and Singapore (TDB-Trade Development Board). These organizations play a significant role in export development not only within the business community, but also within the public sector[1]. Five stages of government involvement in exporting are shown in Table 1 and EPOs play the key role throughout the process. By helping companies transform foreign market opportunities into sales, EPOs remarkably facilitate export development.

It should be noted that there are some nuances between the promotion of traditional exports and the promotion of new export products. The first one can lead only to export growth, whereas the last one concerns diversification (both geographic and products), which is very important for export development.

Export promotion is closely connected with a dismantling of import restrictions. Import tariffs and export taxes have symmetrical effects on domestic relative prices. Both instruments raise the domestic price of imports relative to exports[2]. Moreover, they discourage all types of exports since they cause a country's exchange rate to appreciate. Additionally, tariffs and other import barriers discourage exports by raising the price of imported intermediate inputs used by exporters.

Meanwhile, the Korean experience illustrates an interesting aspect of timing. Direct export promotion was initiated before import liberalization took place in order to relax the balance of payment constraints during a period of declining foreign assistance. It then became the major impulse of sustained export growth[3].

Table 1: Five Stages of Export Involvement by Public Organizations

Stage	Focus	Evaluation Measures
1	Export marketing and improvement of infrastructure	Knowledge, resource level, infrastructure network development
2	Export orientation	Motivation level
3	Export promotion	Need, awareness level
4	Export potential and supply	Opportunity survey
5	Export development	Export growth and optimization of structure of exports

[1] Seringhaus, Rolf F. H.; Rosson, Philip J. (1991), Export development and promotion: the role of public organizations, Boston: Kluver Academic Publishers, p. 364.
[2] Tokarick Stephen, (2006), Does Import Protection Discourage Exports? IMF Working Paper No. 06/20.
[3] Agarwal, Jamuna P.; Langhammer, Rolf J.; Lücke, Mattias; and Nunnenkamp, Peter (1995), Export Expansion and Diversification in Central and Eastern Europe: What Can Be Learnt from East and Southeast Asia? Institut für Weltwirtschaft Kiel, Discussion paper 261.

A number of countries stimulated their exports on the basis of **industrial policy,** having beforehand identified the most prospective manufacturers. In general, this was characteristic of countries with inconsistent reforms. In some cases, such policy yielded positive results, especially when targeted at developing non-traditional exports or exports of technically complex products demanding significant capital investments by organizations to manufacture and promote them on the world market. In this case, financial support from the state-intervening after mobilizing private capital, creating an infrastructure and so on-was important and supported the optimization of the export structure in a rather short period. South Korea can serve as the most indicative example of such a policy.

In cases of state-owned foreign trade monopolies (e.g., China's reform in 1980), a *decentralization policy* plays a prominent role in the first stage of the export promotion strategy. Export promotion through reforms of external economic relations requires progressively decentralized foreign trade systems and foreign exchange allocation systems.

Any decentralization of international trade systems can be organized either by:

- delegating direct trading rights to a larger variety of independent national, provincial and local Foreign Trade Corporations (FTC) and to other provincial authorities; or
- granting foreign trade decision-making powers to those enterprises that produce tradables.

The first approach to trade system reform might be termed administrative decentralization[4], whereas the second approach could be described as market economy-oriented decentralization. Administrative decentralization preserves a system where foreign trade is conducted through intermediation of authorized trading companies[5].

Standards and technical regulations are also the instruments of trade policy and, of course, important parts of the trade debate. The results of a World Bank survey of 619 firms in 17 developing countries[6] indicate that technical regulations in industrial countries adversely affect firms' propensities to export from developing countries. The diversity of standards across foreign countries reduces the economy of scale for firms and influences their decisions about exporting. Moreover, firms outsourcing components are already challenged by multi-standard compliance issues.

The Methods of Export Promotion

Worldwide experience shows that *stimulation of exports occurs in two basic ways: through the formation of a favorable macroeconomic climate and through the creation of stimuli for manufacturers to export.*

The first way is certainly preferable due to the successful experiences of countries with market-driven economies. However, it is used within the scope of some international economic organizations and/or integration unions, and encompasses detailed regulations of trade issues. The experience of developing countries proves that macroeconomic stabilization should be sufficiently advanced before embarking on foreign trade liberalization program. Otherwise, due to excessive inflation and the wrong rate of exchange, imports will rise too steeply, while exports would hardly grow[7]. The successful experience of East Asian countries in maintaining macroeconomic stability, for example, was one of the main reasons it could successfully attract foreign direct investments and other forms of international cooperation.[8]

On the other hand, export instability can cause the macroeconomic uncertainty in developing countries. So, the question is how various agents in a national economy should react to significant uncertainty over the prices of a principal export and, therefore, declining real export earnings and real incomes.

The exchange rate is extremely important from the point of view of the allocation of resources in an economy. Many countries successfully stimulating exports (Chile, Colombia, Mexico, Taiwan, China, South Korea and Indonesia) resorted to undervaluation of their currencies in foreign exchange markets.

[4] Reynold, B. L. (1987), Trade, Employment and Inequality in Post Reform China, Journal of Comparative Economics, vol. 11, p. 484.

[5]Bender Dieter, China's Structural Reforms of the External Sector as a Means of Export Promotion: Inconsistencies and Consequences, (1991), Jahrbuch für Sozialwissenschaft Zeitschrift für Wirtschaftswissenschaften, Band 42/1991, Heft 1, Vandenhoeckand Ruprecht in Göttingen, pp. 34-35.

[6] Chen, Maggie Xiaoyang; Otsuki, Tsunehiro; Wilson, John S. (2006), Do standards matter for export success? Policy Research Working Paper, WPS 3809, World Bank, Washington, D.C.

[7] Bender, Dieter; Currency Convertibility and International Competitiveness, (1993), Address at Plenary Session 1, 19.02.1993, "Shaping a Vibrant India," PHD House, Konrad-Adenauer-Stiftung, New Delhi, p. 19.

[8]Gundlach, Erich; Nunnenkamp, Peter; Catching Up Processes or Decoupling Trends? Developing Countries in the Age of Globalization, (1997), Economics, a biannual collection of recent German studies, v. 55/56, Focus: The changing North-South trade relations and the World Trade Order (WTO), Institute for Scientific Co-operation, Tübingen, Germany, p. 81.

Mussa[9] and Edwards[10] examined the effects of certain financial policies on the equilibrium real exchange rate. Mussa notices that a permanent increase in the real rate of return available to private asset holders results in long run real appreciation; whereas Edwards concludes that capital account liberalization also has this effect. Therefore, financial liberalization may at least partially undermine the export-promoting effects of outward-oriented trade reform.

Connected with exchange rate policy, IMF statistics of official exchange rate regimes confirm that a majority of developing countries prefer exchange rates pegged to a single currency - the U.S. dollar. Among Southeast Asian nations, Malaysia, Singapore and Thailand are basket peggers. The growing number of basket pegs has been accompanied by a spread of managed floating[11].

Criteria for Choosing an Export Promotion Plan

The choice of this or that plan to stimulate exports is made by a country on the basis of the following criteria:

- A strategic direction for export policy (state regulation, market forces, market forces in combination with special measures on export promotion) based on the general macroeconomic policy in the country;
- Definition of internal restrictions on ways to develop exports;
- Highlighting external barriers to exports;
- Identifying sectors with perspectives from the point of view of exports;
- Definition of opportunities for export promotion as a whole, and also separate ways of export promotion;
- Comparison of benefits from export promotion in the long term with the expenses connected with similar promotion (in some cases, a country simply does not have the means to carry out an export promotion policy);
- Selection of countries, goods and/or regions which address export promotion plans; and
- Definition of measures of promotion.

The Role of Differentiation and Specialization in Export Competitiveness

Theoretical models have discussed the importance of horizontal and vertical product differentiation through the production of greater varieties of goods or higher quality goods to maintain export markets [12] and ways to achieve this differentiation through product innovation. In the dynamically developing world economy, specialization in technology-intensive and skilled-labor-intensive goods play a more crucial role than natural resource-intensive, unskilled labor-intensive and primary products.

It should be noted that there is some trade-off between diversification and specialization. It is known that specialization benefits efficiency, but diversification may eliminate negative impacts of market shocks on an economy. Several theories view this trade-off in uninsurable shocks as key determinants of economic development[13].

Sequences of Export Promotion Policies

Sequences of export promotion policies can be classified in the following manner:

1. Macroeconomic stabilization (exchange rate-based stabilization), infrastructural development and financial sector development;

2. Gradual trade liberalization (reducing tariffs, quotas changed into tariffs), export subsidies (direct/indirect), FDI promotion; and

3. Liberalization of international capital flows (opening the capital account).

Additionally, there is one possible negative consequence of export promotion. Domestic prices of exporting goods can increase and affect the living standards of the exporter country if these products are included in the consumer basket.

[9]Mussa, Michael (1986), Nominal Exchange Rate Regimes and the Behaviour of Real Exchange Rates: Evidence and Implications, Carnegie-Rochester Series on Public Policy, pp. 117-213

[10]Edwards, Sebastian (1987), Exchange Rate Misalignment in Developing Countries, UCLA Economics Working Papers 442, UCLA Department of Economics.

[11]Bender, Dieter; Monetary Stability, Export Promotion and Exchange Rate Policy: A macro model of exchange rate management in NICs and its application to Singapore 1975-83, ASEAN Economic Bulletin, v. 2, No. 3, March 1986, p. 197.

[12] Krugman, Paul, (1980), Scale Economics, Product Differentiation and the Pattern of Trade, American Economic Review, Vol. 70, pp. 950-959. Flam, H.; Elhanan, Helpman; (1987), Vertical Product Differentiation and North South Trade, American Economic Review, Vol. 77 (December), pp. 810-822. Grossman, Gene; Elhanan, Helpman; (1991), Quality Ladders and Product Cycles, Quarterly Journal of Economics, Vol. 106 (No.2), 557-586.

[13]Saint-Paul, Gilles; (1992), Technological Choice, Financial Markets and Economic Development, European Economic Review, Vol. 36, No. 4, pp. 763-781.

Conclusions

While integrating into the world economy, countries start from various points in their economy and from different political conditions. A country's cultural and geographic differences, as well as its character in developing democratic rules affect export development and the methods used to promote exports. In developing countries, export promotion policies were carried out at various stages of their industrialization, which deeply influenced their implementation tactics and methods.

The experiences of particularly East and South Asian countries show us that export development was and is based on technological know-how. Therefore, a nation's capabilities to adapt imported new technology, as well as an advanced educational system, are fundamental preconditions for export development in developing countries.

We should realize that any special measures to support export manufacturers and to develop export demand are connected to short-term budget losses and mid-term prospects. That means there either needs to be money in the state treasury (direct crediting of the enterprises, both manufacturers and exporters) or mobilization of private sources. It also demands support from the state (e.g., the state-warranting of export credits), or short-reception in the budget for some receipts (in the case of subsidizing manufacturing, decreases in import duties on the goods used in manufacturing the exported product.)

In the absence of these means, indirect measures to promote exports are necessary. They will not bring additional income to the budget, but they also will not demand allocations from it. Among the alternatives, state warranting of export credits may be the best option. They are widely used by all countries that want to promote exports.

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Conceptual Approaches to the Strategy of Armenia's Economic Development

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Armenia faces the challenge of maintaining its high economic growth achieved primarily through private transfers. This does not create sustainable competitive advantages for the Armenian economy and will not secure Armenia's long-term economic growth. New approaches for the country's development are required.

There are several successful examples of economies that managed to transform their initial acceleration into sustainable growth. A majority of countries achieving these successes adopted consistent strategies for formulating a distinctive value proposition (e.g., Singapore, China and Ireland). A value proposition points to a specific role the country plays in the world or regional economy. What can constitute Armenia's distinct value proposition?

Global Positioning of the Armenian Economy

The current situation in Armenia does not provide grounds for confirming the existence of a certain value. However, Armenia has two options. First, it could consider complete annihilation as an independent player in the global arena. Second, it could transform itself into a supplier of highly qualified human resources for certain sectors of the global economy. The second alternative implies shifting from a temporary exporter of a high-quality workforce for Russia to a location of high-quality human capital for specialized, value-added fields.

The claim for such a specific regional and, in the future, global role is an ambitious, yet fully achievable objective that will require a real breakthrough in how the country currently operates. Scarcity of resources, the unfavorable geo-political situation and transportation problems prevent Armenia from developing other propositions (for instance, becoming a base for expansion into other developed regions, similar to how Ireland and Singapore positioned themselves). On the other hand, the second suggested positioning enables Armenia to compete in creating specific values and to accumulate a notable competitive advantage. However, to create such an advantage Armenia need not compete with re-

source-based economies (China, Russia or Turkey, for example), but with those focused on creating high values (Estonia, Israel, Taiwan and Korea, for example). This means that Armenia's concept of competitiveness must aim at achieving the best international standards in education and training, applied science, management systems, service and work - all of which require special competencies and creative skills - as well as creating a globally competitive business environment in general.

Moving to the Next Stage of Competitive Development

Within the framework of the economic development paradigm based on the concept of competitiveness, three stages of development are identified:

- *Resource-based economy*: competitiveness is achieved through the use of cheap production factors;
- *Investment-driven economy*: competitiveness is achieved through effectively managing large-scale investments;
- *Innovation-driven economy*: competitiveness is achieved by creating a unique value for use in the global market.

Today, Armenia's economy is in the resource-based stage. During the past five years, private transfers from Diaspora have been the main driving force for economic growth. Except for a few industries, it does not stimulate the creation of globally competitive companies. Instead, it contributes to turning Armenia into à "consuming zone." The sectors that compete in the global market - the information technology (IT) and jewelry businesses - now play secondary roles in the economy.

Accordingly, the main challenge in the current stage is attracting large-scale foreign investments in existing and new sectors of the economy to move it into the next stage of development. Increasing large-scale investments must become the priority driving economic policy between 2008 and 2015. This will provide a firm basis for shifting Armenia into the innovation phase of development.

Basic Instruments of the Breakthrough

1. Focus on International Investments

Implementation of the above-mentioned strategic economic goals is impossible without attracting productive foreign capital, especially large, transnational or multinational corporations (MNC). Only they can provide resources at the necessary scale to tackle export markets, distribution channels, technology and world-class business practices.

Until recently, Armenia attracted foreign direct investment (FDI) mainly through politically motivated large infrastructure or privatization deals. During the period of 1998-2004, infrastructure accounted for about 45 percent of FDIs and large privatization deals accounted for 25 percent of FDIs (source: EV). However, these sources will be exhausted within the next two or three years. The new areas necessary to attract foreign capital will require extraordinary and focused efforts from the Armenian government to design distinctive value propositions for MNCs.

The institutionalization of FDI attraction policy initiated in the past did not yield significant results. This was due to a poor understanding of the target audience, the lack of an integral strategy, an extremely ineffective human resource policy and, as a result, passive and spontaneous efforts. Under new conditions, potential investors must receive coordinated and effective signals from the country and reinforced with equivalent actions.

Three key spheres require active institutional policy.

- **Formation of a globally competitive business environment.** Transnational companies are only interested in countries where total expenses of conducting business are lower than in comparative countries or where there are unique opportunities to create new values. This is why the persistent improvement of the Armenian business environment is so important.
- **Creation of new sources of growth.** Even within a favorable environment, business expansion will require special resources and competencies in certain sectors. For Armenia, with its limited natural resources, this may be compensated by technological, managerial and creative competencies in these sectors.
- **Attraction of Diaspora resources.** The third key element for Armenia is the active attraction of Diaspora resources to break the information and reputation vacuum around the country; creating additional incentives for MNCs (including those with Diaspora capital) to choose Armenia as an investment destination; and extensive expansion of the resource base for economic growth.

Implementation of such an institutional policy will require new skills, experience, commitment and professional trust, which today's Armenia lacks. Armenia may achieve a breakthrough only by mobilizing its best managerial resources, including those temporarily located abroad, as well as by attracting high-quality managers and business leaders from abroad and from within Diaspora ranks.

2. Formation of a Competitive Business Environment

The most fundamental and serious competitive disadvantages of Armenia are rooted in the microeconomic realm. With the level of development of the business environment and especially some of its critical components, Armenia is behind its main competitors, including Azerbaijan. The microeconomic business environment should be improved in the following spheres:

- Considerable improvement in the quality of human resources through reforms in healthcare and education by direct government investments and formation of quasi-governmental, specialized institutions with the active involvement of the private sector;
- Targeted modernization of main physical infrastructures (combination of private foreign, international and state resources), especially in the areas of targeted foreign capital;
- Consistent liberalization of the economic life and relief from bureaucratic regulatory mechanisms; Armenia must have a regulatory environment comparable to offshore zones;
- Promoting competition in practically monopolistic spheres of the economy to increase the effectiveness of capital allocation, to reduce costs and to improve the quality of services; and
- Creating equal competitive conditions that eliminate preferential regimes.

These actions are important for not only direct economic benefit, but for their perceived effectiveness as signals of the real intentions of authorities. Such signals are much appreciated by the market and by international players, in particular. However, if no real changes take place within Armenia, the efforts aimed at the outside audience will not produce the desired results.

3. Creation of Sources for a New Growth

Sources for new growth in Armenia can be created by offering resources and competencies in certain sectors which may be integrated into global value chains of international companies. In the case of Armenia, the desired elements of global value chains may be research and development, product testing, production of technological components requiring a disciplined workforce of medium to high qualification, strong creative skills as well as specific managerial resources capable of integrating into international companies and securing the expansion of their businesses into Armenia. These competencies and resources must reach a critical mass in a certain sector in order to attract the attention of MNCs; therefore, they may be created and modernized through focused investments.

Such investments may be directed at special education and creation of training centers, specialized laboratories, obtaining technologies, hiring highly qualified foreign specialists as well as creating experimental productions. The key function of the government must be that of catalyst and coordinator of the process. However, coordination and active involvement of the business sector, educational institutions, professional associations and interested representatives of the Diaspora are preconditions to real success. The scale and novelty of these efforts require active attraction of foreign sources of competence and capital, in particular those of the Diaspora. At the initial stage, they can become autonomous sources for economic growth and, consequently, they will stimulate growth supported by private investments. At the same time, these efforts will be productive only with a distinct focus on certain sectors and, in some cases, even on certain MNCs. Otherwise, the marketplace will not create demand.

Finally, the objective of these initiatives will be the creation of strong and effective clusters (geographically close, interconnected groups of companies and supporting institutions). The very presence of clusters, and not separate companies, makes the given industry attractive for MNCs. On the other hand, the entrance of a large MNC may stimulate the entrance of others and the development of an entire cluster. Considering this, in some cases it will be reasonable to create special infrastructures for certain large MNCs. Special strategies are necessary for companies seeking geographic diversification in development and production, and striving to set itself up in the CIS and the Near East region. To attract such important players, the government may act as a co-investor, providing land, buildings, infrastructures and, in special cases, tax privileges.

4. Attraction of Diaspora Resources

Given the increasing pace of globalization, unprecedented development of communication technologies and the exceptional role of business networks, the Armenian Diaspora may become a unique competitive advantage for the Armenian economy. During the transition period, the role of the Diaspora has been mainly to provide humanitarian aid, private transfers, lobbying of Armenian interests abroad and cultural connections. Despite the FDI policy of the Armenian government that heavily relies on Diaspora, the latter has not become a large-scale investor in the Armenian economy.

For comprehensive deployment of the Diaspora to transform the economy, Armenia must fundamentally change its policy towards Diaspora. They must be seen not only as a source for material resources, but also as an important global commercial network

supporting the Armenian economy with critical, highly skilled human resources.

The competitiveness of an economy cannot be local; it is measured and achieved globally. This suggests a new mental paradigm in relationship to active elements of the Diaspora and a set of coordinated actions. In particular:

- Armenia itself must invest in the Diaspora, especially in maintaining and developing its national identity. Although at the current stage these investments will be mainly cultural, they will result in consolidation of the Diaspora and prevent its quick assimilation.
- Transforming the current national structures into large-scale and effective tools for investing in infrastructure.
- Creating institutional and collective forms of investments such as "development (Diaspora) bonds," investment and venture funds (e.g., Israeli Diaspora bonds).
- Attracting MNCs by leveraging the influence of the Diaspora on the decision-making process within these companies.
- Direct investments in the Armenian economy. The total potential of free investment resources of the active part of the Diaspora is estimated in the range of US$10 to $20 billion. Although in the 1998-2004 period about 70 percent of foreign investors in Armenia were Diaspora Armenians or Diaspora-connected companies, their total investments made up only 24 percent of all FDIs, amounting to US$260 million.
- Repatriating Armenians. Repatriation may become a powerful instrument for stimulating the economy due to additional sources of human and financial capital, as well as the expansion of the domestic market and, accordingly,

increased attractiveness for MNCs. Chances of repatriation are higher among Armenians living in the Near East, Iran and the CIS countries. In case of proper coordination of ideological and financial dimensions within the next 50 years, Armenia is able to repatriate 10,000 to 30,000 people annually, without creating too much pressure on the labor market and effectively integrating them into the Armenian society.

National Leadership

The economic challenges that Armenia faces are difficult to overcome; however, they give Armenia a historical opportunity. The realization of this opportunity requires not only thoroughly worked out, long-term strategies and their consistent and effective implementation, but also an inspiring leadership capable of consolidating, motivating and leading the people and the process itself. The long-term nature of this strategy requires that the leadership see the perspective of the Armenian nation hundreds of years beyond, instead of short political cycles. The leadership should transcend the narrow party interests and boundaries, as well as the boundaries of the present day Armenian state to expand its influence on the active elements of the Armenian nation interested in its revival.

Public Expenditures in the Social Sector and the PRSP

Ruzanna Gabrielyan

The 2004 Budget Law was the first budget based on the priorities set in the Poverty Reduction Strategy Paper (PRSP.) Since 2004, the first priority of the government budget has been the social sector, namely education, health care, social security and insurance. These priority sectors will remain both in the medium- and long-term future. This article represents a brief overview on the public funding of social sectors, current public programs and poverty.

The GDP growth rate of 14 percent recorded in 2005 continues previous trends. This was much higher than the projected growth rate under the PRSP baseline scenario of 6 percent. It is worth noting that almost all major sectors of the economy contributed to the higher-than-projected growth rates. This fact, other things being equal, positively affects the equal distribution of income, especially on incomes earned from employment.

The average monthly salaries in the economy reached AMD 52,059 in 2005 and grew by almost 20 percent as compared to 2004 levels. This exceeds the projected level under the PRSP baseline scenario (AMD 35,048) by 48 percent.

Budget revenues in 2005 grew by 28 percent in nominal terms as compared to 2003, while the expenditures grew by 33 percent. **Revenues and expenditures** of the 2005 consolidated budget (accrual basis) in absolute terms equaled AMD 449.5 and 492.2, respectively. The bulk of revenues came from tax revenues, while the social sector expenditures prevailed in total expenditures.

What concerns the expenditures is the priority sectors, i.e. social sectors[1] . It is worth noting that the growth rate of these expenditures exceeded those of the rest of the expenditure sectors, resulting in shifts in the structure of expenditures towards increasing the share of "social" expenditures to 44.5 percent in 2005 as compared to 30.9 percent in 2003.

According to the 2005 Budget Law, **total revenues** exceed the PRSP-projected total revenues by AMD 53.4 billion in nominal terms. The tax revenues exceed the previously projected levels by AMD 51 billion, while the non-tax revenues by AMD 24.5 billion, whereas the official transfer projections in the 2005 Budget Law are lower than projected under the PRSP by about AMD 20 billion.

Table 1: Economic Growth and Poverty

	2003	2004	2005
Economic growth, %	14	10.5	14
GDP per capita, U.S. dollar	874	1,113	1,524
Poverty, %	*	34.6	29.8
Extreme poverty, %	*	6.4	4.6
Average monthly wages	34,783	43,445	52,059

Table 2: Budget Expenditures in Social Sectors, 2003-2005, AMD billion

	2003	2004	2005
Public Expenditures	**312.5**	**333.9**	**417.5**
Education and Science	34.84	47.44	60.82
Health Care	19.59	24.69	31.07
Social Security and Insurance	29.25	34.98	44.14
Total Expenditures in Social Sectors	**83.7**	**107.1**	**136.0**

[1] *Education, Health, Social Security and Social Insurance*

The expenditures under the 2005 Budget Law as a whole exceed the PRSP-projected levels by AMD 65.5 billion. Half of the exceeded amount (by about AMD 30 billion) is recorded in the priority sectors (social sectors): expenditures in education, by about AMD 11.6 billion; in health care, by AMD 1.4 billion; and social security and social insurance, by AMD 18.9 billion.

Despite that, both revenues and expenditures in 2005 significantly exceeded the PRSP budgetary framework projections in nominal terms; nonetheless, the share of budgetary expenditures and revenues in the GDP remained lower than it was initially projected under the PRSP.

The PRSP Priorities in the Social Sectors and the Possibilities for Funding through the Government Budget

Social Security and Social Insurance

In the social security and social insurance sector, the improvement of targeting the family benefit system in order to use it as an important tool for poverty reduction for the poorest population groups. The policy in the social insurance sub-sector is directed towards increasing the system's efficiency; increasing the size of pensions; as well as expanding the diversification of pensions, depending on the employment record.

Table 3: Consolidated Budget Expenditures in Social Security and Social Insurance Sector, 2003-2005

	2003	2004	2005
Consolidated budget expenditures, total, AMD billion	73.0	85.35	124
Government budget, AMD billion	29.3	34.9	44.1
State Social Insurance Fund, AMD billion	43.2	51	78.9
Average monthly family benefit size, AMD	7,600	9,600	12,000
Average monthly pension, AMD	5,660	8,350	9,735

Expenditures in the social sectors, according to the 2005 budget, increased by AMD 124 billion (or 70 percent) as compared to the actual budgetary expenditures in 2003. In 2005, the expenditures on family benefits totaled AMD 20 billion, increasing almost twice the 2003 level. As a result, the average size of the monthly benefit increased by 58 percent during 2003-2005; while the number of beneficiary households remained the same. The budget expenditures on pensions grew by about 50 percent during the same period, increasing the average size of pensions by 70 percent.

Table 4: Poverty Incidence in Social Groups, 2003-2004*

	2003	2004
Households with unemployed heads	48.9	48.1
Large households (6 and more household members)	57.0	53.8
Households with age-pensioners	46.8	41.9
Single age-pensioners	18.7	14.4
Households with 3 and more children (0-14 years)	66.1	61.0
Households headed by females	43.3	40.3
Households with children under 5	53.9	52.7
National average	42.9	39.0

As seen in this table, poverty reduction was recorded in all social groups in 2004. The largest reduction was recorded among single pensioners where those living in poverty decreased by about 23 percent during 2003-2004. As a whole, this group is the only one where the poverty level is significantly lower than the national average by about 2.7 times. This remarkable reduction in poverty among

this group of single pensioners took place due to the targeted policy stated in the PRSP. In 2004, the average monthly pension size was AMD 8,841, which is about 12 percent higher than envisioned in the PRSP as a target indicator.

Households with three and more children between the ages of zero and 14 years remain the poorest group among the social groups: the poverty level among this group exceeds the national average by 56 percent. Poverty in households with many children (six and more) exceeds the national average by 38 percent, while in the group of households with children under age five, by 35 percent. In fact, the most crucial factor determining poverty of these three groups is the existence of children. Taking this into account, the government decided in 2005 to channel increased budgetary allocations to transfers and benefits paid for each child.

The data in the table below proves the importance of the role of social transfers in reducing poverty. According to these estimates, if we exclude the transfers from the poverty incidence calculations, poverty in 2004 would have constituted 49.9 percent (against actual 39 percent), while the extreme poverty rate would have been 18.6 percent (against actual 7.2 percent).

Table 5: Poverty Incidence Estimates Excluding Social Assistance and Transfers

| | Poverty Incidence including Social Transfers | | Poverty Incidence Before Social Transfers | | | |
| | | | Excluding Social Assistance[2] | | Excluding Social Transfers[3] | |
	2003	2004	2003	2004	2003	2004
Non-Poor Population, %	57.1	61	55.8	58.4	50.1	50.1
Poor Population, %	42.9	39	44.2	41.6	49.9	49.9
Of which: Extremely Poor	7.4	7.2	9.7	10.1	16.2	18.6

The increase in expenditures on pensions occurred due to two main factors: an increase in the revenues of the State Social Insurance Fund (from mandatory social insurance payments), as well as separation of funding for social pensions and non-insurance payments and insurance pensions. In particular, since 2003, social pensions are funded by the government budget. Furthermore, the additions for these periods to be paid by the government, in accordance with the legislation, have also financed from the government budget since 2004.

Overall improvement in resource packages allowed for continuous increases in the amount of pension paid per each employment year, thus aiding in the further differentiation of pensions depending on the number of employment years (AMD 160 in 2005 and AMD 100 in 2003).

Health Care

The objectives of the PRSP in the Health Care sector are improved affordability and service quality by paying attention to primary health care and smoothening out regional disparities.

The 2005 health care budget totaled AMD 31.1 billion, a 60 percent increase from the 2003 level. As a result of increased allocations to the sector, per capita budgetary health care expenditures reached AMD 10,000 in 2005 compared to AMD 6,000 in 2003.

The salaries of medical personnel in polyclinics and hospitals have increased significantly.

The increase in health care financing through the years and, as a priority, directing the bulk of that increase to the primary health care system, enabled all types of primary health care services to be provided free-of-charge to people above 65 years without limitations to the volume or types of services.

With regard to access to medicine, the targeted policy was implemented. Medicine to certain social groups of the population for certain

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[2] *Social assistance includes compensations for former privileges, transfers for children, transfers to single mothers, unemployment benefits, education fellowships, family benefits, etc.*
[3] *Social transfers include the above listed assistance and age pensions.*

types of diseases is provided free-of-charge or at discounts by primary health care institutions: this improves the access to medicine for the poor and vulnerable groups of the population.

Education

The main PRSP objectives in education were the increase in access to education and an improvement in its quality by setting general education as a priority. To that end, the allocations to this sector were intended to grow, along with the implementation of measures to increase the efficiency of the system.

Table 6: Public Expenditures in Education, 2003–2005

	2003	2004	2005
Total, Education sector, AMD billion	35	48	60
Elementary, General and Secondary Education, AMD billion	23	34	44.4

The government sees the increase in **salaries** paid to teachers and school administrations as the major prerequisites to improving the quality of education, defined as one of the key factors in increasing the public expenditures in the education sector. To that end, the current policy aims at increasing salaries to ensure quality improvements. In particular, the monthly salaries of school teachers reached AMD 50,500 in 2005 compared to AMD 18,600 in 2003.

In 2005, 70 percent of education sector allocations were earmarked for general education. The policy of providing textbooks in elementary classes free-of-charge continued.

Priority areas in education are to fund school building and heating improvements to ensure an uninterrupted educational process.

The efficiency of allocated public funds increased, too, due to school optimization and increased weekly workloads of teachers. To ensure efficient and targeted use of funds, all schools transferred to a new financing mechanism and management oversight through boards since 2004.

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Statistical Data

Hereby we present you some statistical data on Main Macroeconomic Indicators, Exchange Rates, Balance-of-Payments, Foreign Trade, External Debt and Investment Position of Armenia. The source of these statistical data is publications of National Statistical Service of RA.

Armenia: Main Macroeconomic Indicators

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Nominal GDP (bln AMD)	522.3	661.2	804.3	955.4	987.4	1,031.3	1,195.2	1,362.5	1,624.6	1,907.9	2,244.0
Nominal GDP (mln USD)	1,286.7	1,599.3	1,638.9	1,892.3	1,845.5	1,911.6	2,153.3	2,376.3	2,807.1	3,576.6	4,902.8
Per Capita GDP (USD)*	408.5	512.1	531.9	620.7	608.2	633.3	717.2	792.1	936.4	1,190.7	1,630.4
Per Capita GNI (USD)*	421.2	526.4	563.9	640.5	626.3	650.8	738.6	821.5	967.9	1,202.9	1,645.3
GDP Real Growth (%)	6.9	5.9	3.3	7.3	3.3	5.9	9.6	13.2	14.0	10.5	14.0
GDP Deflator (%)	161.2	19.6	17.7	10.7	0.1	-1.4	5.8	0.7	4.6	6.3	3.2
Inflation (average, %)	176.0	18.7	13.9	8.7	0.6	-0.8	3.1	1.1	4.7	7.0	0.6
Inflation (end of period, %)	32.2	5.7	21.9	-1.3	2.0	0.4	2.9	2.0	8.6	2.0	-0.2
Exchange Rate (AMD/USD, average)	405.9	413.4	490.8	504.9	535.1	539.5	555.1	573.4	578.8	533.5	457.7
Unemployment (average, %)	6.7	9.3	10.8	9.4	11.2	11.7	10.4	10.8	10.1	9.6	8.2
Wages (monthly average, USD)	17.4	22.9	27.7	35.6	37.7	42.1	44.1	47.7	60.1	81.4	113.7
State Budget Revenues and Grants (bln AMD)	94.0	98.2	126.2	168.7	190.9	172.1	193.6	228.3	292.0	302.2	374.7
State Budget Revenues and Grants / GDP (%)	18.0	14.9	15.7	17.7	19.3	16.7	16.2	16.8	18.0	15.8	16.7
State Budget Expenditures (bln AMD)	125.2	127.2	146.9	204.6	242.6	222.9	244.4	263.9	312.7	334.0	417.5
State Budget Expenditures / GDP (%)	24.0	19.2	18.3	21.4	24.6	21.6	20.4	19.4	19.2	17.5	18.6
State Budget Deficit / GDP (%)	6.0	4.4	2.6	3.8	5.2	4.9	4.3	2.6	1.3	1.7	1.9
Education & Science / GDP (%)	na	2.3	1.9	2.1	2.2	2.8	2.4	2.1	2.1	2.5	2.7
Public Health / GDP (%)	na	1.4	1.2	1.4	1.4	1.0	1.3	1.2	1.2	1.3	1.4
Social Insurance & Social Security / GDP (%)	na	1.1	1.6	2.1	2.6	2.1	2.2	1.7	1.8	1.8	2.0
External Debt (mln USD)	-	536.3	682.5	775.3	870.3	859.5	905.5	1,025.5	1,097.7	1,182.9	1,099.2
External Debt / GDP (%)	-	35.3	42.0	42.4	46.2	46.0	42.6	44.0	38.2	30.1	22.1
Domestic Debt / GDP (%)	0.04	1.5	2.9	2.1	2.3	2.9	3.0	3.0	2.7	2.4	2.3
Current Account Balance / GDP (%)	-17.0	-18.2	-18.7	-21.3	-16.6	-14.6	-9.3	-6.2	-6.7	-4.5	-3.9
Exports, g&s (mln USD)	299.5	368.1	330.2	359.3	383.1	446.9	539.6	697.6	903.5	984.9	1,336.6
Exports, g&s / GDP (%)	23.3	23.0	20.1	19.0	20.8	23.4	25.1	29.4	32.2	27.5	27.3
Imports, g&s (mln USD)	726.1	888.1	952.5	1,000.0	919.1	966.2	977.6	1,107.1	1,405.9	1,513.6	1,983.8
Imports, g&s / GDP (%)	56.4	55.5	58.1	52.8	49.8	50.5	45.4	46.6	50.1	42.3	40.5
Broad Money (bln AMD)	40.3	54.4	70.2	97.1	111.1	151.7	172.2	203.1	233.8	285.9	365.6
Reserve Money (bln AMD)	29.4	41.3	50.6	53.8	53.9	72.4	80.4	111.3	118.6	132.1	200.6

* EDRC estimation

Table 1.1 Exchange Rate AMD/USD (average)

Period	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
January	127.5	405.9	402.0	452.1	497.1	535.6	527.0	553.4	564.1	583.0	568.4	491.7	451.7
February	195.7	405.3	402.7	466.6	499.1	543.3	527.9	552.2	565.3	586.4	564.4	473.4	450.1
March	206.0	404.0	403.4	477.7	502.1	537.2	527.5	546.0	572.1	590.4	562.9	466.0	451.0
April	260.7	408.1	405.5	482.2	502.6	535.5	530.9	547.8	578.3	588.1	556.9	447.9	450.0
May	316.9	408.9	406.7	492.3	503.1	538.8	534.1	553.8	580.8	586.0	552.7	449.3	439.7
June	315.6	409.4	409.2	511.4	503.0	545.3	543.7	555.1	580.7	585.2	543.9	449.0	420.6
July	310.1	407.8	413.3	504.3	501.7	542.8	548.1	554.1	565.7	579.6	525.9	442.6	417.4
August	318.4	409.2	418.5	502.1	501.8	540.4	540.5	554.6	558.5	578.1	517.6	461.0	401.9
September	340.3	406.9	414.0	501.1	506.4	534.2	539.8	554.1	564.5	574.8	513.4	454.4	387.9
October	363.9	400.1	416.3	500.6	508.3	520.7	545.0	560.8	581.5	563.9	506.4	449.4	381.3
November	403.6	402.4	431.1	499.9	515.1	523.3	555.5	564.7	584.3	564.6	502.7	458.3	376.2
December	414.3	402.7	438.8	498.8	518.4	523.8	554.5	564.6	584.6	565.3	486.3	449.4	364.6
Exchange Rate Annual Average	297.7	405.9	413.4	490.8	504.9	535.1	539.5	555.1	573.4	578.8	533.5	457.7	416.0

Table 1.2 Exchange Rate AMD/USD (end of period)

Period	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
January	144.8	406.4	402.1	462.3	498.0	546.9	529.0	554.3	564.4	584.7	566.0	478.5	449.2
February	244.6	403.0	402.9	469.0	500.7	540.2	527.8	548.4	568.2	588.5	564.3	471.2	450.7
March	228.4	406.9	404.2	477.5	502.4	535.3	527.6	544.7	576.0	589.5	561.6	458.1	450.9
April	295.1	407.8	405.8	486.3	503.1	536.3	530.7	548.6	579.3	587.0	547.1	439.3	446.1
May	326.1	409.3	408.0	504.8	503.1	543.2	536.6	556.2	582.2	585.0	548.4	445.1	427.6
June	308.7	408.2	409.8	509.8	501.9	543.8	547.9	554.1	577.1	584.8	534.5	442.3	418.8
July	310.8	409.1	417.3	502.7	501.7	542.8	545.8	553.9	561.5	574.0	519.1	447.7	415.3
August	323.9	407.9	418.8	501.1	502.1	538.5	540.2	555.0	557.0	581.2	515.3	468.3	396.5
September	349.0	400.0	412.3	501.1	507.9	515.1	536.4	554.1	580.2	570.1	508.2	444.2	381.5
October	380.6	400.8	421.0	499.9	509.4	519.2	551.4	563.0	582.7	558.3	504.3	451.2	378.9
November	421.3	403.3	434.1	500.0	517.1	530.2	554.0	566.5	585.8	566.2	501.0	449.4	369.1
December	405.5	402.0	435.1	495.0	522.0	523.8	552.2	561.8	584.9	566.0	485.8	450.2	363.5

Table 1.3 Exchange Rate AMD/EUR (average)

Period	1999	2000	2001	2002	2003	2004	2005	2006
January	623.4	535.2	518.5	498.7	619.6	717.0	645.8	547.1
February	609.8	519.7	508.8	491.7	631.9	713.1	616.1	537.9
March	585.8	508.8	498.2	500.5	637.2	690.1	614.6	542.0
April	574.2	504.0	487.3	511.7	637.3	668.7	579.4	550.1
May	573.8	483.0	486.4	531.3	677.0	662.0	571.3	560.8
June	566.1	515.3	473.7	554.4	682.3	660.3	546.4	532.4

	1999	2000	2001	2002	2003	2004	2005	2006
July	560.5	516.3	476.7	562.4	659.3	644.8	533.7	529.1
August	574.1	490.2	498.0	546.1	643.3	630.1	566.4	514.6
September	562.0	472.2	504.5	553.3	643.8	626.4	557.5	494.1
October	558.1	467.5	508.2	570.2	659.4	632.2	540.2	480.9
November	541.8	475.1	502.4	584.7	660.7	651.8	540.6	483.7
December	530.3	497.3	503.5	594.8	693.4	650.8	532.7	481.8
Exchange Rate Annual Average	**571.7**	**498.7**	**497.2**	**541.6**	**653.8**	**662.3**	**570.4**	**521.2**

Table 1.4 Exchange Rate AMD/EUR (end of period)

Period	1999	2000	2001	2002	2003	2004	2005	2006
January	626.6	527.8	509.6	488.1	628.5	705.7	623.3	542.7
February	592.7	518.0	497.0	491.6	631.9	702.2	620.4	534.2
March	573.9	504.8	482.6	503.3	632.6	684.4	593.0	545.4
April	569.3	487.9	494.4	523.6	643.1	647.0	566.9	553.8
May	575.1	483.0	475.7	545.8	687.8	667.1	555.1	548.9
June	564.9	515.8	471.6	567.0	667.4	650.4	533.2	524.7
July	575.6	512.4	484.7	552.2	655.5	624.2	541.7	526.0
August	562.8	484.3	504.8	548.3	629.3	620.8	570.5	508.3
September	558.7	476.0	510.9	567.4	650.7	626.3	535.9	485.0
October	546.4	459.0	507.0	572.5	655.3	641.0	547.7	481.9
November	535.6	474.3	500.3	581.9	673.9	663.7	529.9	485.6
December	**527.4**	**513.8**	**495.1**	**606.9**	**702.2**	**661.1**	**532.4**	**478.7**

Table 1.5 Exchange Rate AMD/RUB (average)

Period	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
January	90.2	83.9	80.0	80.6	23.1	18.3	19.4	18.4	18.3	19.7	17.6	15.9
February	89.7	82.1	81.8	81.3	22.6	18.1	19.3	18.3	18.4	19.8	16.9	16.0
March	81.8	82.0	82.9	81.8	22.4	18.3	19.0	18.3	18.7	19.7	16.9	16.2
April	79.4	82.2	82.9	82.0	21.1	18.5	19.0	18.5	18.8	19.4	16.1	16.3
May	79.4	81.7	84.1	81.9	21.2	18.8	19.1	18.6	18.9	19.1	16.1	16.3
June	83.3	80.5	87.3	81.3	21.4	19.1	19.0	18.5	19.2	18.7	15.8	15.6
July	89.2	79.7	85.8	80.4	21.9	19.6	18.9	18.0	19.1	18.1	15.4	15.5
August	91.8	79.0	85.2	70.2	21.7	19.5	18.8	17.7	19.0	17.7	16.2	15.0
September	89.4	76.7	84.9	28.5	21.0	19.4	18.8	17.7	18.8	17.6	16.0	14.5
October	86.8	76.4	84.6	30.5	20.2	19.5	18.9	18.3	18.7	17.4	15.7	14.2
November	87.4	78.2	84.0	28.9	19.6	19.9	18.8	18.3	18.9	17.6	15.9	14.1
December	85.1	79.0	82.7	25.4	19.4	19.8	18.7	18.3	19.2	17.4	15.6	13.9
Exchange Rate Annual Average	**86.1**	**80.1**	**83.8**	**62.7**	**21.3**	**19.1**	**19.0**	**18.2**	**18.8**	**18.5**	**16.2**	**15.3**

Note: data for 1995-1997 in AMD per 1000 RUB.

Table 1.6 Exchange Rate AMD/RUB (end of period)

Period	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
January	84.8	83.3	80.3	81.1	22.6	18.0	19.4	18.4	18.3	19.9	17.1	16.0
February	86.0	81.4	81.9	81.6	22.6	18.5	19.1	18.3	18.4	19.8	17.0	16.0
March	79.0	82.4	82.5	81.3	21.5	18.2	18.9	18.4	18.8	19.7	16.5	16.2
April	78.5	82.0	83.4	82.0	21.0	18.6	19.0	18.5	18.8	18.9	15.8	16.3
May	80.0	81.3	86.3	81.6	21.2	18.9	19.1	18.6	19.0	18.9	15.8	15.8
June	88.9	80.2	87.0	81.0	21.8	19.4	19.0	18.4	19.3	18.4	15.4	15.5
July	90.3	79.6	85.5	80.2	22.1	19.7	18.9	17.8	19.0	17.8	15.6	15.5
August	91.5	78.1	84.9	25.1	21.5	19.4	18.8	17.6	19.1	17.6	16.4	14.8
September	87.3	76.2	84.9	32.1	21.0	19.3	18.8	18.2	18.6	17.4	15.6	14.3
October	86.4	76.8	84.7	28.2	20.1	19.6	18.8	18.3	18.7	17.5	15.9	14.2
November	87.6	78.5	83.9	27.8	20.0	19.9	18.8	18.3	19.0	17.7	15.6	14.0
December	**84.0**	**78.0**	**81.1**	**24.7**	**19.0**	**19.6**	**18.5**	**18.3**	**19.2**	**17.5**	**15.6**	**13.8**

Note: data for 1995-1997 in AMD per 1000 RUB.

Table 2.1 Balance of Payments (million USD)

Indicators	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Current Account Balance	**-66.8**	**-103.8**	**-218.4**	**-290.7**	**-306.5**	**-402.9**	**-306.9**	**-278.3**	**-199.6**	**-147.9**	**-189.4**	**-161.6**	**-193.3**
Goods Balance	**-98.0**	**-178.3**	**-403.0**	**-469.2**	**-559.5**	**-577.5**	**-474.0**	**-463.5**	**-420.2**	**-368.8**	**-434.1**	**-458.0**	**-587.9**
Exports F.O.B.	156.2	215.4	270.9	290.3	232.5	220.5	231.7	300.5	341.8	505.2	685.6	722.9	973.9
Other Exports	-	-	-	0.1	1.1	8.4	15.6	9.4	11.3	8.6	10.5	15.4	30.9
Imports F.O.B.	-254.2	-393.6	-673.9	-757.4	-779.4	-794.7	-697.3	-759.5	-753.9	-863.6	-1,115.9	-1,173.1	-1,556.1
Other Imports	-	-	-	-2.3	-13.7	-11.6	-24.0	-14.0	-19.4	-19.0	-14.4	-23.2	-36.7
Services Balance	**-22.8**	**-27.0**	**-23.7**	**-50.8**	**-62.8**	**-63.2**	**-62.0**	**-55.8**	**-17.8**	**-40.7**	**-68.3**	**-70.7**	**-59.3**
Transport Services	-18.5	-28.7	-28.9	-55.9	-41.2	-57.2	-54.0	-52.0	-49.4	-65.6	-78.3	-105.1	-98.5
Other Services	-4.3	1.6	5.3	5.1	-21.6	-6.1	-8.0	-3.8	31.6	24.9	10.0	34.4	39.2
Income, net	**-1.3**	**-4.0**	**40.0**	**44.7**	**98.5**	**60.4**	**54.9**	**52.9**	**64.5**	**88.2**	**94.5**	**36.7**	**44.7**
Compensation of Employees	-	-	53.0	55.7	124.0	82.3	78.8	77.0	72.5	105.4	133.7	178.8	207.7
Other Income	-1.3	-4.0	-13.0	-11.0	-25.5	-21.9	-23.9	-24.1	-8.1	-17.2	-39.3	-142.1	-163.0
Current Transfers, net	**55.2**	**105.6**	**168.3**	**184.6**	**217.2**	**177.4**	**174.1**	**188.1**	**174.0**	**173.4**	**218.5**	**330.4**	**409.2**
Official	55.0	94.4	149.9	117.1	149.4	112.7	93.8	102.5	71.9	54.7	60.2	61.0	67.3
Private	0.2	11.1	18.4	67.5	67.8	64.7	80.3	85.6	102.1	118.7	158.3	269.4	341.9
Capital and Financial Account	**51.8**	**99.1**	**207.2**	**277.2**	**298.3**	**399.4**	**294.5**	**261.3**	**189.0**	**152.7**	**190.9**	**162.6**	**188.8**
Capital Account	**5.1**	**5.7**	**8.1**	**13.4**	**10.9**	**9.7**	**12.6**	**28.3**	**30.1**	**68.1**	**89.9**	**34.3**	**50.9**
Capital Transfers	5.1	5.7	8.1	13.4	10.9	9.7	12.6	28.3	30.1	68.1	89.9	34.3	50.9
of which General government	5.1	5.7	8.1	13.4	10.9	9.7	16.9	29.5	32.6	70.2	86.6	13.1	18.0

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2006
Financial Account	46.7	93.3	199.2	263.8	287.4	389.6	281.9	233.0	158.9	84.7	100.9	128.3	137.9
Direct Investment	0.8	8.0	25.3	17.6	51.9	220.8	122.0	104.2	69.9	110.7	120.5	216.6	251.5
Portfolio Investment	-	-	-	7.2	15.8	-15.9	1.6	-18.9	-5.7	1.5	0.3	-2.9	-1.6
of which General government	-	-	-	5.4	9.8	-21.2	1.9	-0.2	-0.5	-1.3	0.4	-3.8	-0.2
Other Investment	90.4	106.6	248.6	297.8	290.6	237.2	178.8	166.9	114.4	53.5	27.4	-59.1	50.0
Trade Credits	-	42.1	59.0	53.0	52.5	91.7	41.7	70.4	25.6	-15.1	22.8	1.7	-25.0
Loans	99.0	79.9	197.6	202.8	178.7	106.3	95.4	54.7	83.6	46.1	61.4	23.8	93.4
Monetary authorities	-	24.6	46.4	54.1	23.5	49.1	15.4	-14.9	7.2	12.0	1.5	-0.8	-26.0
General government	99.0	55.3	151.2	102.2	122.9	35.0	80.2	44.3	64.2	45.1	24.7	38.5	37.4
Banks	-	-	0.01	17.9	10.3	20.0	-7.6	-1.9	-6.1	-21.2	3.0	7.0	7.8
Other sectors	-	-	-	28.6	22.0	2.2	7.4	27.2	18.1	10.3	32.1	-20.8	74.2
Cash money	-	-8.2	0.1	55.3	56.9	30.3	41.9	23.3	6.2	-29.6	-33.7	-79.5	1.4
Other	-8.6	-7.3	-8.2	-13.3	2.6	8.9	-0.1	18.5	-0.9	52.1	-23.0	-5.1	-19.8
Reserve Assets	-44.6	-21.2	-74.7	-58.9	-71.0	-52.5	-20.6	-19.2	-19.6	-81.1	-47.3	-26.3	-162.1
Net Errors and Omissions	15.1	4.7	11.2	13.5	8.3	3.6	12.5	17.0	10.5	-4.9	-1.4	-1.0	4.5

Table 3.1 Exports by Main Groups of Goods (million USD)

Indicators	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2006
Exports	**156.2**	**215.5**	**270.9**	**290.3**	**232.5**	**220.5**	**231.7**	**300.5**	**341.8**	**505.2**	**685.6**	**722.9**	**1,004.0**
Foodstuffs	10.4	12.9	12.6	11.8	24.6	16.8	15.9	27.3	48.0	54.8	72.2	69.2	95.3
Mineral Products	2.3	17.8	28.8	19.1	17.9	22.2	31.0	37.2	37.9	42.1	50.3	99.6	136.4
Plastics, Rubber and Articles thereof	4.3	7.9	10.8	8.2	9.2	8.1	9.1	9.0	13.1	6.3	4.8	10.1	28.1
Textile Production	14.8	15.8	15.2	9.7	10.6	13.6	13.6	13.2	24.3	28.6	31.2	44.0	35.5
Precious Stones and Metals	41.0	75.2	89.6	140.3	55.2	53.1	99.9	121.5	122.8	258.3	350.7	299.3	320.4
Non-precious Stones and Metals	5.3	9.4	30.5	47.3	57.7	40.3	25.0	44.2	28.5	44.8	90.4	137.6	280.8
Machinery and Equipment	25.3	30.9	39.1	34.3	32.2	40.8	17.5	31.0	43.4	21.4	20.1	21.9	20.8
Vehicles, Aircraft, Ships and Parts thereof	4.7	1.7	11.4	2.7	2.0	3.3	2.7	1.8	2.4	15.0	14.5	9.4	13.9
Instruments and Apparatus	2.5	4.0	3.9	2.5	4.8	3.7	1.6	2.3	3.8	19.2	31.5	7.1	22.7
Other Goods	45.5	39.9	29.1	14.4	18.3	18.7	15.5	13.0	17.6	14.5	19.8	24.7	50.0

Table 3.2 Imports by Main Groups of Goods (million USD)

Indicators	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2006
Imports	**254.2**	**393.8**	**673.9**	**855.8**	**892.3**	**902.4**	**811.3**	**884.7**	**877.4**	**987.2**	**1,279.5**	**1,350.7**	**2,194.4**
Products of animal origin	23.0	46.1	63.3	67.4	58.5	47.0	41.5	33.6	30.8	27.7	32.8	40.3	40.1
Vegetable Products	45.5	64.3	85.6	112.8	105.3	117.8	75.7	99.1	85.2	74.4	75.0	109.0	112.0
Foodstuffs	16.8	32.5	51.5	85.1	86.1	110.0	77.0	69.8	76.9	79.3	93.3	112.6	163.9
Mineral Products	105.1	161.0	224.7	186.5	209.8	204.6	176.0	179.3	188.2	171.4	179.5	209.4	365.8

Indicators	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2006
Chemical Products	4.2	9.1	55.4	56.2	85.2	73.7	71.4	82.4	65.1	62.8	78.4	85.2	152.1
Textile Production	4.5	8.7	7.8	21.0	33.7	31.7	30.0	32.1	36.0	36.1	39.8	47.1	59.3
Precious Stones and Metals	26.8	31.8	62.4	129.8	47.5	45.5	86.7	113.2	106.8	213.5	333.1	291.5	312.5
Non-precious Stones and Metals	11.1	3.6	16.0	10.2	24.6	20.1	23.8	24.4	88.4	55.7	76.7	60.8	163.7
Machinery and Equipment	4.0	8.0	49.6	80.5	102.2	65.8	81.4	117.2	36.1	103.4	133.8	135.5	305.1
Vehicles, Aircraft, Ships and Parts thereof	1.9	2.0	6.4	12.0	15.8	47.3	33.1	23.2	25.9	39.9	78.5	92.5	197.3
Other Goods	11.3	27.0	51.3	94.4	123.7	138.8	114.6	110.4	138.2	123.0	158.7	166.6	322.6

Table 3.3 Exports by Countries (million USD)

Indicators	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2006
Exports	**156.2**	**215.5**	**270.9**	**290.3**	**232.5**	**220.5**	**231.7**	**300.5**	**341.8**	**505.2**	**685.6**	**722.9**	**1,004.0**
CIS Counties	**126.6**	**157.9**	**169.6**	**133.7***	**94.7**	**80.5**	**56.4**	**73.4**	**89.1**	**96.3**	**129.1**	**125.1**	**212.6**
Russia	58.5	83.9	90.8	96.1	62.9	40.0	33.9	44.6	60.5	64.6	94.4	77.9	121.7
Turkmenistan	57.0	65.6	68.7	17.5	13.8	22.7	6.1	5.5	0.8	2.8	3.6	0.6	1.8
Georgia	3.2	2.9	2.7	6.9	10.7	9.6	11.1	16.0	12.4	16.6	18.7	29.1	54.3
Other	8.0	5.4	7.4	7.6	7.3	8.3	5.3	7.3	15.3	12.3	12.4	17.5	34.8
Non CIS Counties	**29.6**	**57.6**	**101.3**	**156.6**	**137.8**	**140.0**	**175.3**	**227.1**	**252.8**	**408.8**	**556.5**	**597.8**	**791.4**
Belgium	14.9	26.0	30.8	14.7	47.0	49.8	84.2	75.1	46.5	92.3	123.8	107.9	108.8
Iran	5.5	14.6	35.0	43.9	42.6	31.4	34.2	30.1	31.9	31.5	22.5	30.6	29.5
USA	0.2	0.4	0.6	4.4	7.1	11.6	16.0	37.9	52.3	46.2	56.1	70.6	65.0
Germany	0.3	6.6	10.1	3.7	9.3	9.3	10.2	12.9	11.1	28.2	44.4	83.2	148.0
United Kingdom	0.0	0.5	1.3	3.2	1.2	8.1	9.4	10.1	20.1	51.1	42.6	1.2	7.6
Turkey	0.3	0.2	2.6	6.0	7.2	3.0	1.1	1.5	1.1	1.4	1.2	2.0	2.2
Other	8.4	9.5	20.9	80.6	23.6	26.8	20.1	59.6	89.8	158.2	265.9	302.3	430.2

Also included "Trade made by citizens", which couldn't be classified by countries for 1996.

Table 3.4 Imports by Countries (million USD)

Indicators	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2006
Imports	**254.2**	**393.8**	**673.9**	**855.8**	**892.3**	**902.4**	**811.3**	**884.7**	**877.4**	**987.2**	**1,279.5**	**1,350.7**	**2,194.4**
CIS Counties	**168.2**	**205.6**	**334.0**	**332.6***	**299.1**	**230.2**	**187.2**	**173.6**	**218.5**	**302.2**	**281.3**	**290.0**	**573.5**
Russia	77.9	112.2	135.1	125.5	215.9	191.4	149.9	137.2	173.6	193.3	203.4	179.7	365.3
Georgia	19.5	17.8	61.8	51.2	38.2	26.8	26.9	19.8	18.5	31.5	33.0	48.5	75.6
Turkmenistan	64.1	69.6	129.3	86.4	27.7	0.6	0.8	1.1	0.8	25.0	0.1	0.1	0.4
Other	6.7	5.9	7.7	14.6	17.4	11.4	9.6	15.5	25.5	52.5	44.9	61.7	132.3
Non CIS Counties	**86.0**	**188.3**	**339.9**	**523.2**	**593.2**	**672.2**	**624.1**	**711.1**	**658.9**	**684.9**	**998.2**	**1,060.7**	**1,620.8**
USA	26.9	96.1	114.4	103.6	116.1	96.3	85.7	102.7	84.2	52.7	111.2	104.8	136.6
Belgium	2.9	1.4	15.6	49.3	49.7	54.6	85.2	84.4	41.8	91.1	129.1	109.0	157.4

Iran	15.8	42.5	89.8	149.8	88.7	63.9	78.5	82.3	78.1	62.6	70.2	76.3	132.5
United Kingdom	0.2	0.5	2.2	7.1	10.5	69.1	67.0	59.5	91.2	28.1	83.3	106.8	79.4
UAE	2.7	1.1	13.8	33.4	71.7	54.5	40.2	41.7	47.4	42.9	60.5	65.2	145.2
Turkey	0.0	0.5	2.6	6.3	38.4	56.8	40.2	40.5	33.8	38.2	36.7	39.8	88.6
Germany	0.3	6.9	11.3	17.4	26.2	34.0	34.2	36.5	34.0	42.9	43.8	73.9	85.3
Italy	31.1	8.9	22.4	26.2	36.2	34.6	23.7	25.7	29.6	36.6	36.2	38.3	76.5
Other	6.1	30.3	67.8	130.2	155.7	208.3	169.5	237.8	218.9	289.7	427.2	446.6	719.3

* Also included "Trade made by citizens", which couldn't be classified by countries for 1996.

Table 4.1 International Investment Position (million USD, end-year)

Indicators	1997	1998	1999	2000	2001	2002	2003	2004	2005
Net International Investment Position	**-563.4**	**-908.9**	**-1,118.8**	**-1,300.3**	**-1,434.2**	**-1,512.4**	**-1,514.8**	**-1,691.5**	**-1,759.4**
Assets	**382.3**	**416.4**	**488.9**	**529.4**	**544.2**	**685.1**	**786.9**	**978.3**	**1,130.5**
Direct Investment Abroad	0.0	0.0	0.0	0.0	0.0	0.4	0.4	2.7	10.3
Portfolio Investment	0.6	0.2	0.1	19.3	8.9	4.5	4.5	4.6	5.9
Other Investment	141.8	124.1	185.8	196.0	204.1	248.0	278.0	421.0	440.4
Reserve Assets	239.8	292.1	303.0	314.1	331.2	432.3	504.1	550.0	673.8
Liabilities	**945.6**	**1,325.3**	**1,607.7**	**1,829.7**	**1,978.4**	**2,197.6**	**2,301.7**	**2,669.9**	**2,889.9**
Direct Investment in Reporting Economy	103.4	312.7	421.4	513.1	579.9	684.5	793.4	1,005.1	1,279.3
Portfolio Investment	21.2	3.4	4.5	4.8	5.9	5.8	6.4	4.3	4.5
Other Investment	821.0	1,009.2	1,181.9	1,311.8	1,392.6	1,507.2	1,501.9	1,660.5	1,606.0

Table 4.2 Structure of International Investment Position (%, end-year)

Indicators	1997	1998	1999	2000	2001	2002	2003	2004	2005
Assets	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Direct Investment Abroad	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.9
Portfolio Investment	0.2	0.0	0.0	3.6	1.6	0.7	0.6	0.5	0.5
Other Investment	37.1	29.8	38.0	37.0	37.5	36.2	35.3	43.0	39.0
Reserve Assets	62.7	70.2	62.0	59.3	60.9	63.1	64.1	56.2	59.6
Liabilities	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Direct Investment in Reporting Economy	10.9	23.6	26.2	28.0	29.3	31.1	34.5	37.6	44.3
Portfolio Investment	2.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
Other Investment	86.8	76.1	73.5	71.7	70.4	68.6	65.3	62.2	55.6

Table 5.1 External Debt (million USD)

Indicators	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total External Debt	**536.3**	**682.5**	**775.3**	**870.3**	**859.5**	**905.5**	**1,025.5**	**1,097.7**	**1,182.9**	**1,099.2**
Total External Debt (excluding Guarantees and Special Programs)	522.0	640.4	738.7	834.1	826.5	856.7	987.9	1,086.8	1,174.7	1,092.8
Debt of Government of RA	**407.7**	**503.3**	**546.8**	**632.9**	**651.0**	**684.3**	**793.1**	**872.2**	**957.0**	**916.4**
Credits Multilateral	219.3	296.9	349.2	438.0	471.7	510.5	606.3	744.0	845.6	803.3
Credits Bilateral	188.3	206.4	197.6	194.9	179.3	173.8	186.8	128.2	111.4	113.1
Debt of Central Bank of RA	**114.4**	**137.1**	**191.9**	**201.2**	**175.5**	**172.5**	**194.8**	**214.6**	**217.6**	**176.4**
Credits Guaranteed by Government and CB of RA	**14.3**	**42.1**	**36.6**	**29.7**	**19.1**	**27.9**	**19.4**	**7.3**	**5.2**	**3.1**
Special Programs	**-**	**-**	**-**	**6.5**	**13.9**	**20.9**	**18.1**	**3.5**	**3.0**	**3.3**

Table 5.2 Structure of External Debt (%)

Indicators	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total External Debt	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Debt of Government of RA	**76.0**	**73.7**	**70.5**	**72.7**	**75.7**	**75.6**	**77.3**	**79.5**	**80.9**	**83.4**
Credits Multilateral	40.9	43.5	45.0	50.3	54.9	56.4	59.1	67.8	71.5	73.1
Credits Bilateral	35.1	30.2	25.5	22.4	20.9	19.2	18.2	11.7	9.4	10.3
Debt of Central Bank of RA	**21.3**	**20.1**	**24.7**	**23.1**	**20.4**	**19.0**	**19.0**	**19.6**	**18.4**	**16.0**
Credits Guaranteed by Government and CB of RA	**2.7**	**6.2**	**4.7**	**3.4**	**2.2**	**3.1**	**1.9**	**0.7**	**0.4**	**0.3**
Special Programs	**-**	**-**	**-**	**0.7**	**1.6**	**2.3**	**1.8**	**0.3**	**0.3**	**0.3**

Table 5.3 Share tructure of External Debt (%)

Indicators	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total External Debt	**35.3**	**42.0**	**42.4**	**46.2**	**46.0**	**42.6**	**44.0**	**38.2**	**30.1**	**22.1**
Debt of Government of RA	**26.8**	**31.0**	**29.9**	**33.6**	**34.9**	**32.2**	**34.0**	**30.4**	**24.4**	**18.4**
Credits Multilateral	14.4	18.3	19.1	23.2	25.3	24.0	26.0	25.9	21.5	16.1
Credits Bilateral	12.4	12.7	10.8	10.3	9.6	8.2	8.0	4.5	2.8	2.3
Debt of Central Bank of RA	**7.5**	**8.4**	**10.5**	**10.7**	**9.4**	**8.1**	**8.4**	**7.5**	**5.5**	**3.5**
Credits Guaranteed by Government and CB of RA	**0.9**	**2.6**	**2.0**	**1.6**	**1.0**	**1.3**	**0.8**	**0.3**	**0.1**	**0.1**
Special Programs	**-**	**-**	**-**	**0.3**	**0.7**	**1.0**	**0.8**	**0.1**	**0.1**	**0.1**