

# Economic Challenges Faced by the New Armenian State

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**Abstract:** In the past fifteen years Armenia has experienced profound economic changes. This article will trace the economic development of Armenia, from the collapse of the Soviet Union until now, and make recommendations on the reforms that need to be implemented if Armenia is to continue developing.

**Key words:** economic transition, international financial institutions, macroeconomic stabilization

The process of the political and economic transition of Armenia toward independence has similarities with the other republics of the former Soviet Union. Contextual specificities, on the other hand, are less known, because they are largely determined by an individual republic's transition toward civil society and a market-based economy.

In the case of Armenia, this contextual specificity is Nagorno-Karabakh, which was, as of March 1988, at the center of a political movement initiated by a group of intellectuals meeting within the Karabakh Committee. In the context of perestroika and glasnost, these intellectuals supported the efforts of their Karabakh compatriots to correct the injustice committed by Stalin in 1922 that consigned the Armenian area of Nagorno-Karabakh to Azerbaijan.

This ended on September 21, 1991, with the proclamation of Armenia's independence based on a general referendum. The new leaders were not members of the old nomenklatura, and they quickly appeared to be proponents of democracy and a market-based economy. Independence, and the hope it inspired, made people optimistic that a new class of leaders would arise from the groups of intellectuals and former dissidents. The euphoria that gripped Armenia was reminiscent of what was happening in Central Europe, Poland, Czechoslovakia, and Lithuania.

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Harsh economic realities that threatened the sovereignty of the young republic quickly constrained political independence. The country had to contend with the problem of how to make itself economically viable. The still-significant consequences of the earthquake in December 1988 and the economic blockade by Azerbaijan and Turkey exacerbated economic difficulties. This new political reality, which also applied to the other republics in the region, shed a new light on the geopolitical, economic, and strategic realities. It was under these conditions that Armenia began its difficult transition to a market-based economy.

### **Armenia's Metamorphosis**

During the Soviet period, Armenia acquired the enviable reputation of being a successful, industrial republic with a diversified economy that specialized in technological research, especially research related to the military-industrial complex. In the 1980s, the number of graduates from higher learning institutions was one of the highest in the Soviet Union. Despite being deprived of natural resources, save for important copper, bauxite, molybdenum, and some gold deposits, the country succeeded in becoming a manufacturing and technological center. The manufacturing material arrived from outside Armenia and the products were then shipped to central planning bodies in charge of distribution. Given the significant contribution of industry to the net material product,<sup>1</sup> and an economy highly integrated into the Soviet system of production distribution, economic interdependence became excessive. This helps explain the domino effect that took place after the collapse of the Soviet Union.

Industrial development in Armenia dates back to the second half of the nineteenth century, with the construction of three Transcaucasian railways: Baku-Tbilisi (1883), Tbilisi-Aleksandrapol (Leninakan during the Soviet period, currently named Gyumri, 1902), and Aleksandrapol-Yerevan (1902). The tsar was interested in exploiting three principal resources in the region: oil in Baku, manganese in Tchiaturinski (Georgia), and copper in Zangezour (Armenia). Because of the Russian Empire's financial situation, foreign capital was needed to exploit these resources. The French took over the copper mines. French and Russian companies controlled the production of wine and cognac.

The first phase of Armenia's development took place from 1920 to 1940, with the nationalization of companies and resources under the Soviet regime, "the electrification of the Russias," and the development of infrastructures, primarily transportation and, finally, heavy industry. After World War II, from 1946 to 1960, the machine-tool industry was introduced; it developed three times faster than the other industrial branches. Diversification continued with the development of the chemical, mechanical, and electro-technical industries, as well as the development of light industry (textiles, shoes, and leather). The period from 1960 to 1970 was marked by the emergence of consumer goods industries.

Between 1960 and 1980, as the share of industry moved from 66.9 percent to 71.6 percent, the economic and sociological profile of Armenia became that of a welfare state, which relied on the rest of the Soviet Union to sustain its economy. As a result, in 1989, 50.8 percent of the total volume of industrial production and

71.9 percent of industrial credits were dependent on Soviet subsidies. In comparison, the figures were 28 percent and 59 percent for Estonia, 28.9 percent and 72.4 percent for Tajikistan, 28.4 percent and 48.2 percent for Moldova, and 31.4 percent and 66.9 percent for Georgia. These are important figures because they show vulnerable Armenia's industrial production was to the collapse of the Soviet Union.

Cooperatives, a semiprivate sector created by Mikhail Gorbachev during perestroika to spur economic growth, proved to be an important part of the economy. By January 1, 1990, 4,005 cooperatives employed 70,000 people, comprising approximately 6–7 percent of total industrial production.

The first signs of industrial decline in Armenia became apparent at the time of the earthquake in December 1988, which destroyed 40 percent of the light industry in the Gyumri and Vanadzor areas, the second and third largest cities in the country, respectively. The contribution of the industrial sector to the gross domestic product (GDP) decreased from 59.9 percent in 1989, to 45.4 percent in 1990 and then to 30.5 percent in 1993. Following independence in 1991, Armenia declared all its companies to be part of the national wealth and placed them under the authority of the Ministry of Industry. The ministries of Industry, Light Industry, Food, and Procurement, and a state-sponsored group of construction material companies led the reorganization of industry.

### **The Chaotic Post-Soviet Collapse**

The economic deterioration that began in 1989, increased significantly in 1992. Statistics show a decrease of 37.5 percent of the GDP that year compared with 1990; all sectors contributing to the GDP decreased in production compared with 1991. Sectoral contributions to the GDP underwent a structural modification with the collapse of industry in favor of agriculture, whose products were largely imported during the Soviet period.

The blockade of Armenia by Azerbaijan and Turkey, through which Armenia's traditional trade routes ran, exacerbated the isolation of the country. The only way to move goods was through Iran to the south and Georgia to the northeast. The immediate consequences of this blockade were shortages of energy and food supplies, which crippled the country.

The beginning of independence was difficult. The enthusiasm for democracy achieved without bloodshed soon gave way to the fear that history would repeat itself. Armenians became increasingly dissatisfied with their deteriorating standard of living. During the difficult years from 1991 to 1994, government policy could be summarized as follows: no yielding on Karabakh, providing essential goods and services to the public, and managing shortages as best as possible. To supply the country's basic needs, the first decision, made between 1991 and 1992, was land reform and the privatization of land. This allowed for the emergence of small-parcel agriculture supplying markets and supporting self-sustenance during the period of shortages.

The second decision, made on January 1, 1992, a period of chronic shortages, was the first stage of price deregulation, which allowed goods to stay in Armenia as opposed to being exported for better prices. Price increases were not on par with

some income levels; the inflation rates were 10 percent in 1990, 100 percent in 1991, and 642.5 percent during the first four months of 1992, compared with the first four months of 1991. Thus, there were two opposing dynamics: price increases in response to shortages and falling incomes due to the recession and unemployment.

The third major decision led to Armenia's monetary sovereignty with the adoption of the *dram* as the national currency on November 22, 1993. Once the former republics of the Soviet Union fully asserted their independence, control by the Central Bank of Russia over the ruble became almost impossible; the republics were using their power to create their own budgetary policies. In the battle for influence in Russia in 1993, the reformers won over the hardliners who wanted to preserve the ruble zone. On July 24, 1993, President Yeltsin suspended the convertibility of rubles issued between 1969 and 1992.

Armenia and the other former Soviet republics plunged into deep confusion. For political reasons and their own economic vulnerabilities, they had not hurried to introduce their own currencies, despite the fact that the depreciation of the ruble and rising inflation had reduced the savings and retirement benefits accumulated during the Soviet period to almost zero.

During the third quarter of 1993, Armenia entered a period similar to the 1980s in Latin America, when hyperinflation ravaged the economies. Price increases averaged 117 percent a month. People tried to avoid the use of a currency that had lost its essential functions of internal convertibility and for purchasing goods. Merchants refused to sell their goods for a currency that did not allow them to replenish their stocks. It had become difficult to even buy a *pirochki* in Yerevan.

On October 18, 1993, President Levon Ter-Petrossian and Prime Minister Hrand Bagratian made one last attempt to persuade Russia to maintain the ruble zone so that Armenia could make the necessary preparations to introduce the *dram*. Nonetheless, on November 22, Armenia introduced the *dram* as the new national currency. In the absence of a stabilization fund, it was difficult to defend the parity of the currency and to set up essential foundations for its credibility. One of the principal attributes of national sovereignty was adopted under these difficult circumstances.

### **Financial Crisis and General Insolvency**

The depression rarefied the liquidities and the currencies in circulation, generating a breakdown of the payment mechanisms, which lead to general insolvency. The republics increased barter exchanges as a means to carry on their bilateral trade and save their currency resources. Since 1992, the Armenian authorities encouraged trade relations with Russia, Kazakhstan, Georgia, and Latvia within the framework of agreements or treaties finalizing of important volumes of exchanges. They envisaged the reciprocal delivery of goods, enumerated in lists resembling catalogs. It frequently happened that these commitments could not be fulfilled; for example Armenia only honored 50 percent of its obligations.

The government also negotiated financial assistance with the European Union (EU) and loans from the Central Bank of Russia, in exchange of the purchase of raw materials and some products from Russia.<sup>2</sup>

The consequences of such activities during that period was a drop of 61.2 percent of the GDP from 1990 to 1994, and a distortion of the contribution of various sectors to economic growth. In five years, Armenia went from a country where growth was driven by industry to a country dependent on agriculture.

The traditionally high contribution of the industrial sector to the GDP dropped from 60.21 percent in 1980 to 38.35 percent in 1980 to 48.20 percent of the national income in 1994, mainly thanks to the privatization of land (see figure 3).<sup>3</sup> Meanwhile, the growing role of agriculture created the opportunity to replace many imports with goods produced domestically. The productivity of agriculture is very low because it lacks size, farm equipment, fertilizers, and irrigation systems.

This period of depression, which saw a sharp decline in the standard of living, was followed by a period of macroeconomic stabilization.<sup>4</sup>

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***“To supply the country’s basic needs, the first decision, made between 1991 and 1992, was land reform and the privatization of land.”***

### **The Urgency of Reforms and Macroeconomic Stabilization**

Stabilization is characterized by improvement of the main macroeconomic indicators and sustained implementation of structural reforms. Obviously, there is a strong connection between stabilization and reforms, because the results of stabilization depend on how effectively reforms are implemented. As Janos Kornai argued, stabilization is related to institutional changes.

Stabilization is also the consequence of a mechanical phenomenon that occurs after a depression, when economic activity decreases to a point that a reversal occurs and a catching up takes place. The point at which the reversal occurs varies, but economic policy can influence its timing.

During 1994, one could see the deceleration of degradation for the following reasons:

The signing in May 1994 of a cease-fire in the Karabakh war. The cease-fire allowed the return of relative political stability and raised hopes that negotiations between the parties would result in a peace agreement.

From an economic point of view, the most important event was the beginning of Armenia’s involvement in international financial institutions (IFIs), namely the International Monetary Fund (IMF) and the World Bank (WB), which had waited until the fighting stopped. They negotiated with the Armenian government to develop a plan for Armenia’s economic development. This plan was accompanied by a timetable for its implementation. The first request for IMF financing, in November 1994, was for the amount of 17 million SDR.<sup>5</sup> The arrival of these institutions gave new life to the implementation of reforms.<sup>6</sup>

In Armenia, the implementation of economic reforms was not marred by political or ideological confrontations because the Armenian leadership was con-

vinced that they were necessary. The bulk of the reforms had been written with the IMF and the WB, providers of the necessary capital for their financing. The office of the IMF representative to the Finance Ministry was very close to that of the Finance Minister.

The IFIs had doubts, even before engaging in such programs, regarding the capacity of the post-Soviet republics to accept the discipline and rigor necessary for the implementation of reforms. The *modus operandi* was conceptualized by an expression of consensus in Washington,<sup>7</sup> which put an end to the hesitations between a policy of gradual reforms and shock therapy. The resources of these organizations were essential to the rebuilding of the country. Thanks to the willingness of the government and to the actual results, relations with the lenders became excellent, so much so that Armenia became one of the countries whose rate of financing per capita was one of the highest. The will to reform was the only source of inspiration the country had to improve its immediate situation.

The indicators testify to this improvement; since 1995, the rate of inflation decreased from 11,000 percent in 1993 to 5,273 percent in 1994 and to 14 percent in 1997. The *dram* reached a plateau in 1996. Another very important factor was the reopening of the Metzamor nuclear power plant in 1995,<sup>8</sup> which put an end to the energy crisis by providing the country with one-third of its energy needs.

### **Objectives of Macroeconomic Stabilization**

This period of stabilization lasted from 1995 to 1997 and started the beginning of a new period of rebuilding and structural transformation in the Armenian economy.

Stability is composed of five objectives, called the pentagon of stabilization:

- to define a new form of development that allows for the creation of new margins of economic maneuvering;
- stability of the exchange rates and control of inflation at levels that do not produce a redistribution of patrimony or structural causes to inflationary anticipations;
- the rate of unemployment must be the lowest possible and growth redistribution the broadest possible;
- the budget must move toward a level of deficit that can be financed without inflationary pressures; and
- the current accounts balance must allow the repayment of foreign debt relative to a percentage of GDP.

These five conditions were part of the objectives of economic policy in Armenia, but they were insufficient without the privatization of productive wealth, the development of an infrastructure conducive to economic development, support for the private sector with the development of positive or negative incentives, and the creation of an attractive business environment.

### **The Imperative of Macrofinancial Stability**

Along with budgetary policy, monetary policy is one of the two instruments of the policy mix. In accordance with the recommendations and conditions of the

IFIs vis-à-vis economies in transition, these two policies were entrusted to different institutions. Monetary policy was entrusted to the Central Bank of Armenia (CBA), whose independence was prescribed by statute. Its mission consists of ensuring the stability of the national currency and controlling inflation. This separation of economic powers encourages a larger sense of responsibility. The government, controlled by the Parliament, is in charge of budgetary policy, and the CBA is in charge of monetary policy. The two need to establish the credibility for their respective policies to create confidence and stability. Also, they need to coordinate their policies effectively to foster economic growth.

Following the adoption of the dram, the CBA achieved its goal of relative stability of the national currency, stopped hyperinflation, and avoided considerable obstacles, including the consequences of the Russian financial crisis of 1998. For that purpose, it adopted careful, strict management of the money supply to prevent inflation.

The restoration of public finances was another key factor in macroeconomic stabilization. The first phase of price deregulation in 1992 was complemented by the price deregulation of public services, such as water, electricity, and telephones. Price deregulation showed the costs of exploiting public services and how much investment would be necessary to maintain and modernize public services.

Since 1995, the deregulation of public utilities has reduced the burden on the budget because it eliminated public-service subsidies. This change will increase the taxes of public utilities (see table 1 and figure 1) which will modify the structure of relative prices and the budget of households.

The direction of budgetary policy, and the institutions related to it, changed considerably in its objectives and means. The budget and the various extra budgetary funds are no longer the quasi-exclusive channel for financing economic activity.

The principal budgetary reforms consisted of removing subsidies, increasing the rate of tax collection, improving the transparency of budget financing, and adjusting capital expenditures according to precise objectives in relation to budget programming and planning.

From 1995 to 1999, the budget deficit was reduced from 11 percent to 5.2 percent of the GDP. This was due to the joint effects of these measures and economic growth, except during the Russian financial crisis in 1998, which accentuated the budget deficits of 1998 and 1999.

### **The Emergence of a Private Sector and Trade Liberalization**

In March 1992, Armenia became the first country in the Commonwealth of Independent States (CIS) to privatize land; however, the process of privatizing state-owned enterprises did not begin until 1995. As is the case of other economies in transition, the top priority of privatization in Armenia was the introduction of entrepreneurial discipline and corporate financial responsibility.

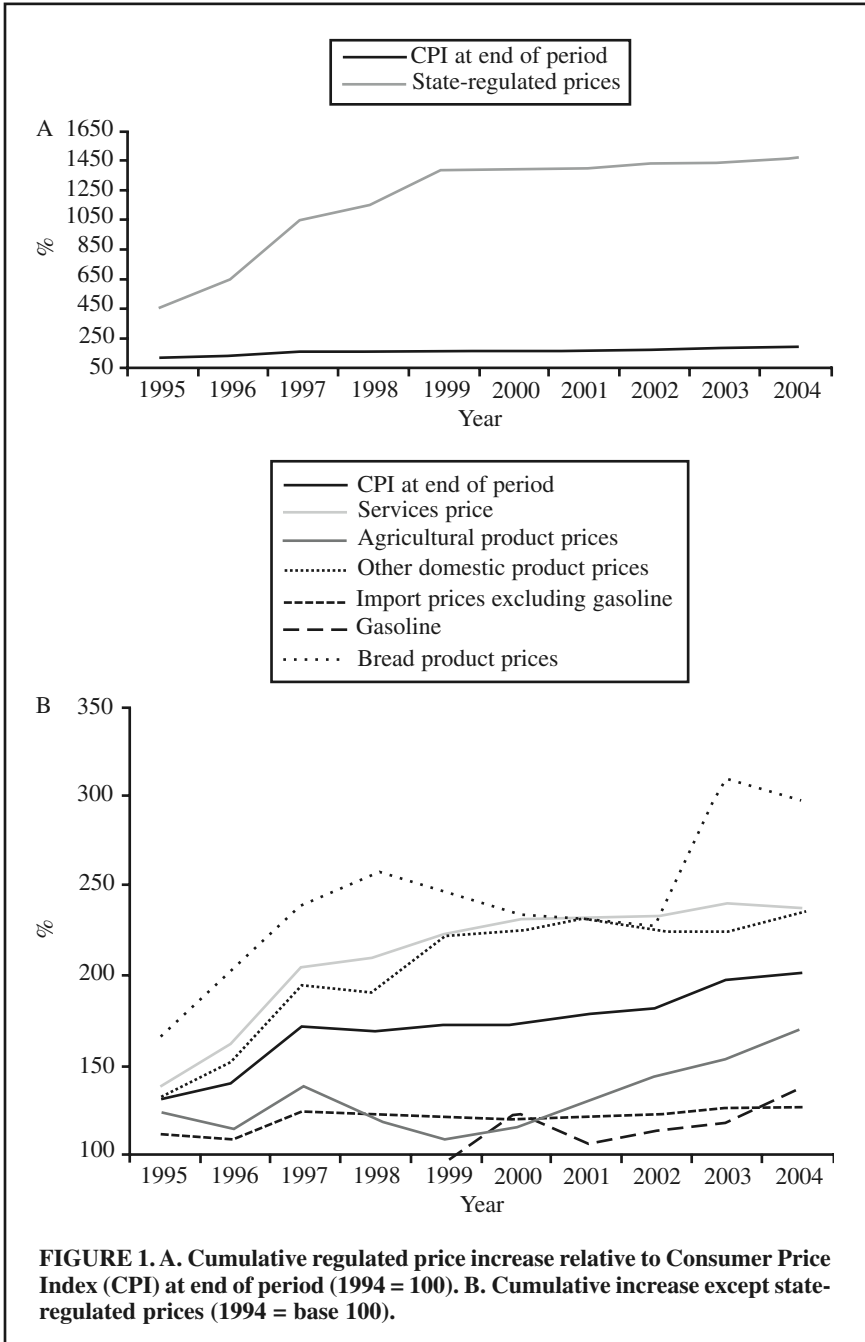
For the government, the difficulty consisted in finding the resources allowing the achievement of this objective in the context of a tightened economic situation as a result of stabilization policies. The first phase of this privatization had been committed in the form of two preliminary transformations: corporatization, which

TABLE 1. Consumer Price Index Structure

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
CPI at end of period	132.6	140.1	170.1	168.6	172.2	172.8	177.8	181.3	196.9	200.8
Service prices	138	161.7	203.8	209.3	222.9	230.3	232	232.7	238.9	236.9
Agricultural product prices	123.1	113.6	137.8	119.2	108.6	114.3	129.2	143.6	153.4	168.2
State-regulated prices	473.8	650.5	1053.8	1157.7	1388	1392.4	1394.2	1427.9	1438.9	1469.2
Other domestic product prices	137.1	153.6	195.3	189.9	222.8	226.1	232.5	225	225	235.1
Import prices excluding gasoline	112.1	108.5	124.6	121.8	121.8	119.7	121.5	122.4	125.9	126
Gasoline	62.2	62.4	71.3	76.8	97.2	123.9	106.3	115	119.6	137.3
Bread-product prices	165.7	202	238.3	254.2	245.1	233.3	231.4	226.7	208.6	297.2
CPI at end of period	32.2	5.6	21.9	-1.3	2.1	0.4	2.9	2.0	8.6	2.0

Source: Armstat, International Monetary Fund. Note: CPI = Consumer price index.





**FIGURE 1. A. Cumulative regulated price increase relative to Consumer Price Index (CPI) at end of period (1994 = 100). B. Cumulative increase except state-regulated prices (1994 = base 100).**

transformed the legal statute of enterprises into limited-liability companies with open shareholding; and marketization, which introduced a financial constraint on profitability.<sup>10</sup>

Bidding began on May 17, 1995, but the process of privatization ran into many obstacles. There was a shortage of available savings suitable to be transformed into requests for privatized credits. To overcome this difficulty, at the launching of the privatization campaign, the government proceeded with the distribution of free certificates of privatization or vouchers that allowed adjustment to the level of the demand for assets to that of the supply.<sup>11</sup>

These certificates assumed a double function of quasi-money and compensation for the transfer of assets, which, prior to privatization, had belonged to “the people.” This situation improved in the beginning of 2000, with foreign investments from various sources, which included remittances and direct investments by Armenians in the diaspora, especially the “internal”<sup>12</sup> one; foreign direct investments by companies attracted by the pri-

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***“The restoration of public finances was another key factor in macroeconomic stabilization. The first phase of price deregulation in 1992 was complemented by the price deregulation of public services, such as water, electricity, and telephones.”***

vatization of large companies;<sup>13</sup> and network infrastructures.

The inadequacy of public information campaigns and the lack of investment<sup>14</sup> funds did not allow the public to fully appreciate the opportunity these transactions offered. During the bidding on enterprises, it was common to observe unusual enthusiasm for the purchase of stocks on behalf of former managers of state-owned companies whose balances did not show a favorable situation. This asymmetry of information was often the guarantee of a good purchase price and accurate information was not where it should have been. Under these conditions, most voucher holders preferred to yield them against liquidities, thus accentuating their rebate value to the greatest advantage of stock buyers. There is an intrinsic relationship between lack of transparency and weak intermediation in private stocks and shares.

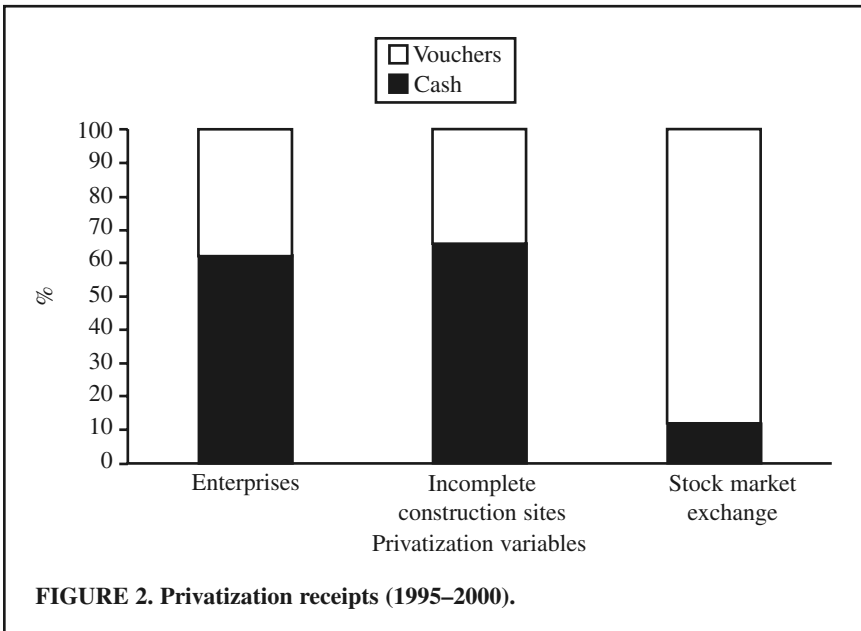
Privatization and its industrial objective were difficult to reconcile (see table 2 and figure 2). During the first years, the absence of budgetary means did not make it possible to finance through the budget. The state’s first income from privatization came in 1998; such income was assigned to the reduction of the foreign debt, especially with Russia, and for financing of the Project Public Priority.

### **Opening of Foreign Economic Relations and Trade Liberalization**

The opening of economic relations was one of the great changes of the post-Soviet period. It put an end to the prevailing opacity of economic flows and the prohibition of contacts with foreign countries considered dangerous until then. After gaining independence, foreign economic relations became an essential prerogative and a paramount vector of integration and economic growth. In retrospect,

**TABLE 2. Budget Revenue of the Privatization of 1995 to 2000**

	1995	1996	1997	1998	1999	2000
Number of privatized enterprises (end of period)	240	853	1250	1450	1514	1553
Privatization receipts in state budget (millions of drams)	48	1773	9134	20616	10928	21508
Privatization receipts in % of gross domestic product	0	0	0	2.2	1.1	2.1



these relations took the forms of emergency and humanitarian aid, including concessionary credits provided by the IFIs, technical aid, foreign trade, and foreign direct investment.

The structure of the balance of payments shows the essential role of external economic relations. Since 1995, the credits provided by IFIs and nonofficial<sup>15</sup> transfers have financed the important demand push at the origin of the first phase of growth. The liberalization of trade allowed a massive amount of imported products, whose production was no longer assured to satisfy the market created by those with a taste for Western goods.

Since 1998, the engine of growth has been the privatization of companies and the opening of their capital to foreign direct investment. Between 1995 and 1997, imports were 53.4 percent of GDP; this decreased to 44.7 percent between 1998 and 2001. This decrease occurred at the expense of nonessential products; demand for the rest—energy, precious or semiprecious stones, and uncut diamonds intended to be cut in Armenia—remained solid or critical. Approximately 30 to 60 percent of the growth originated by this substitution, which produced a ratchet effect on the related branches of economic activity, such as agriculture and food processing, which represent about half of the manufacturing gross output.

### **New Division of National Income**

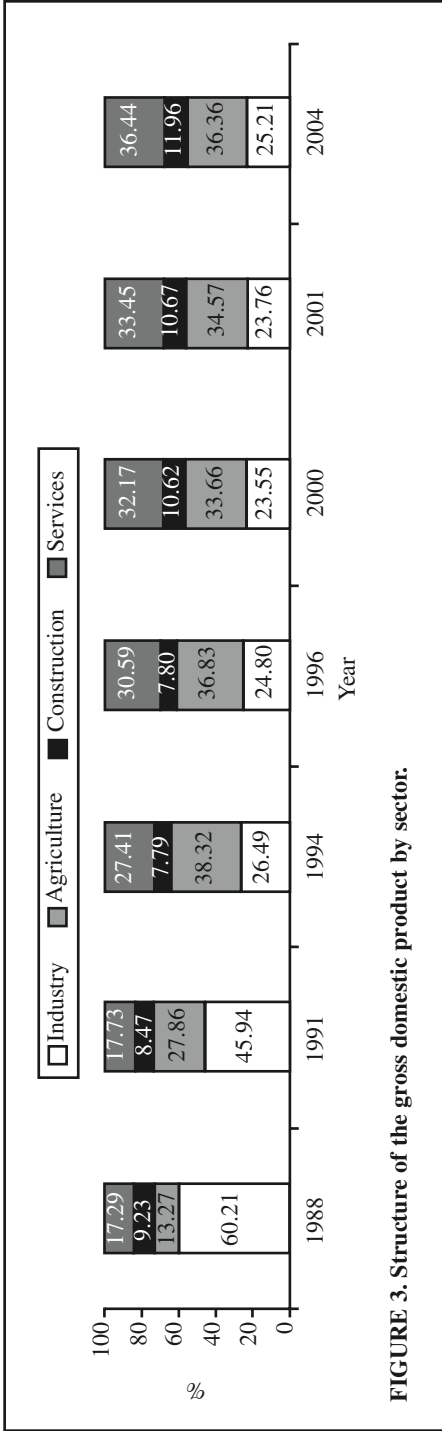
A review of the experience of various post-Soviet economies shows that they passed through three distinct phases: depression from 1991 to 1994, stabilization from 1995 to 1998 and, since 1999, a structural strengthening of conditions for growth.<sup>16</sup> The statistics show that the national income underwent substantial changes on both the qualitative and quantitative levels (see figure 3). On a qualitative level, the relative share of the various sectoral contributions to the national income changed with the decline of industry following the collapse of the Soviet Union.

On a quantitative level, it is possible to appreciate the correction that allowed the growth during the second period. If we place the statistical series on a basis of 100 for the year 1990, the corresponding GDP index of 1990 would have been 105.4 in 2004 (see figure 4).

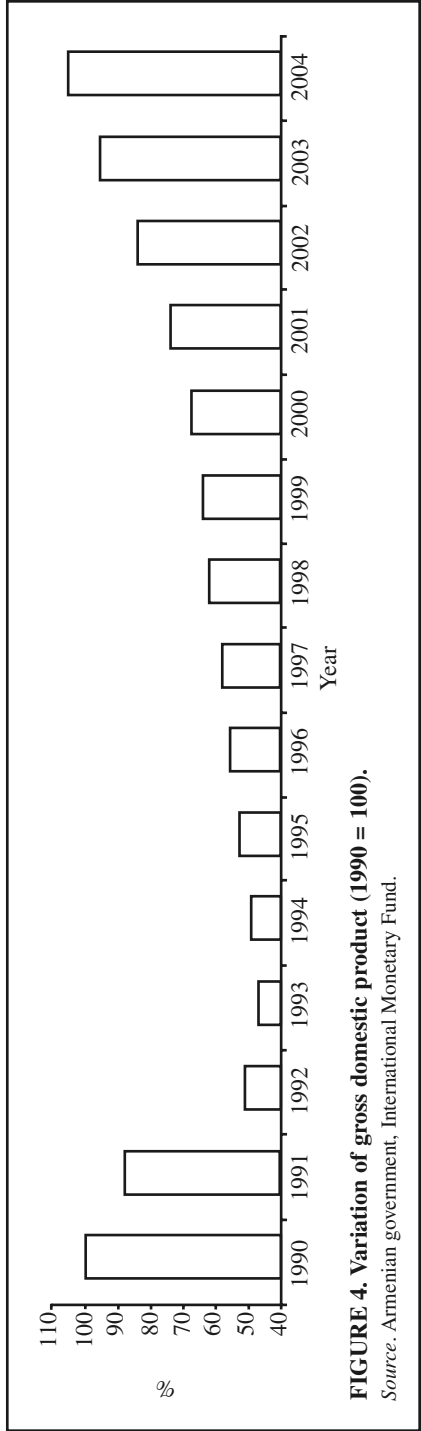
It is necessary to put this quantitative result in context because the conditions of 1990 are so different from those of 2004; this catching up effect has been reached with very different sectoral contributions and redistribution levels (see figure 5 and figure 6).

In quantitative terms, the correction is a tangible indicator marking the end of the depression cycle of post-Soviet economies. The current situation is qualitatively very different compared with 1990. Agriculture, trade and other services drove economic growth during this period. They accounted for 44 percent and 38 percent of employment, respectively. These sectors developed because infrastructure was modernized through financing by the WB and the European Bank for Reconstruction and Development. The creation of the Agricultural Cooperative Bank of Armenia aided the development of agriculture and the food-processing industry.<sup>17</sup> The communication sector is developing, but there is still progress to be made. The end of Armentel's—a private communications company—monopoly in wireless networks is good news. Mobile telephone calls and international services increased by 17.2 percent and 37 percent respectively.

In the service sector the share of transport is strong due to foreign-trade activity. Rail-bound transport is used for mining products, ferrous metals, cement, and building materials, which are important for Armenia's foreign trade. It is also interesting to note the significant emerging sector of legal and financial services. Still, the most important area of gainful employment since the 1990s is commercial activity.

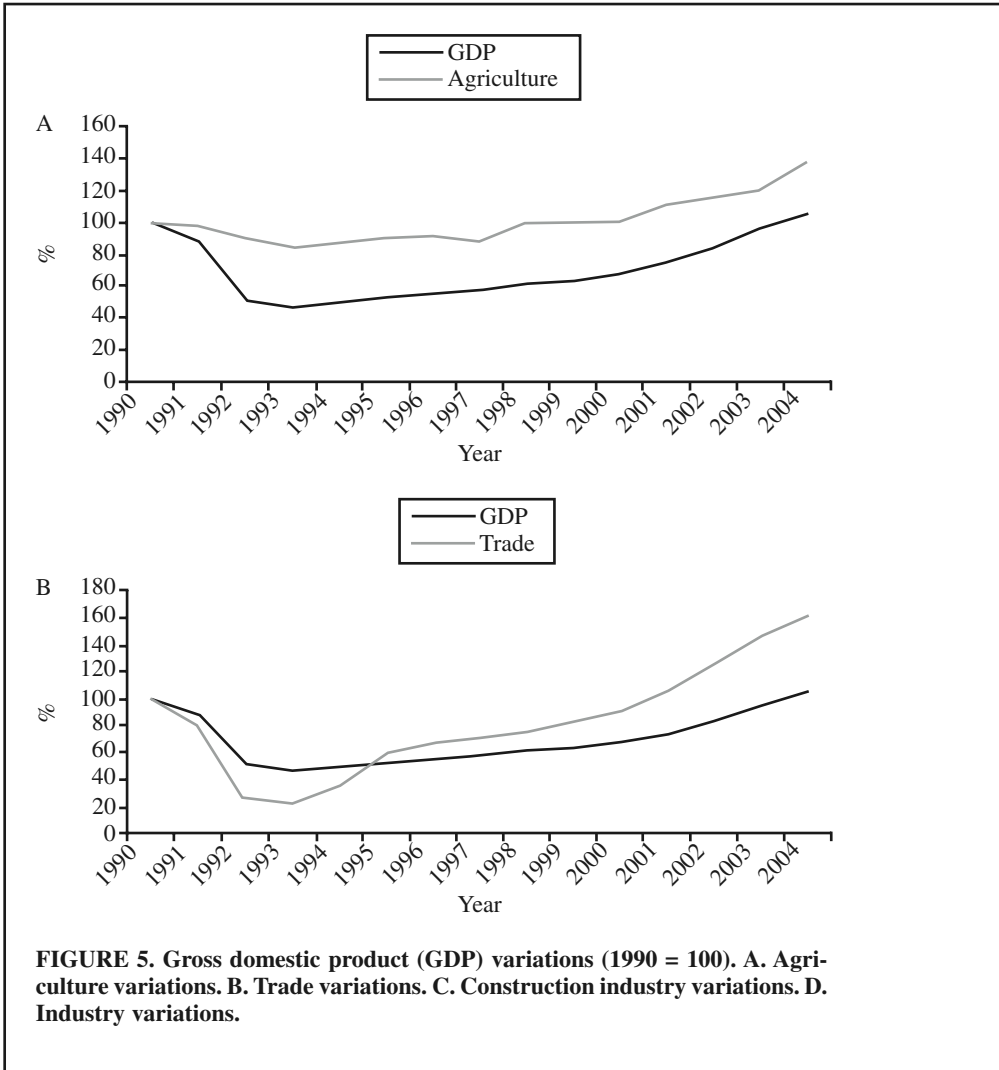


**FIGURE 3. Structure of the gross domestic product by sector.**



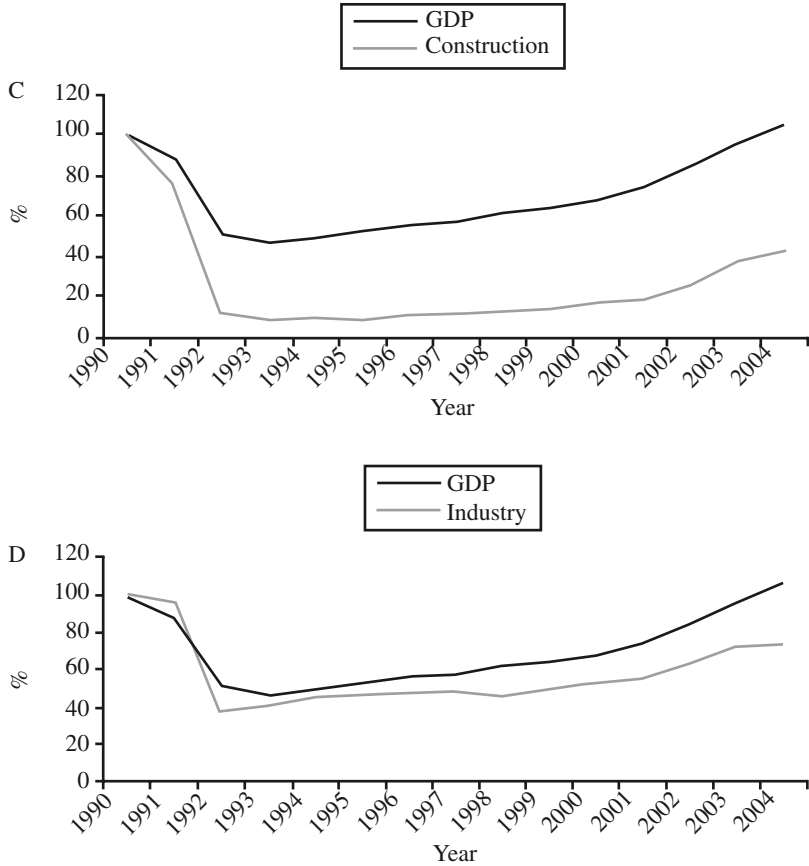
**FIGURE 4. Variation of gross domestic product (1990 = 100).**

Source. Armenian government, International Monetary Fund.



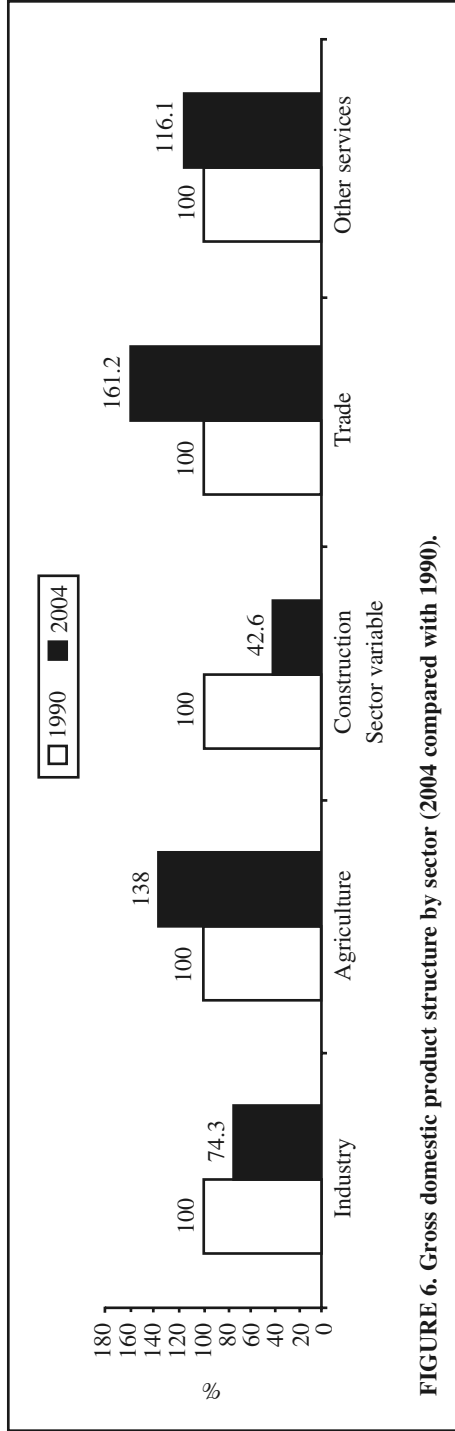
### Conditions for Durable Growth

The privatization of companies spurred economic growth and attracted investments. However, the transfer of property was not sufficient enough to create the environment necessary for the development and creation of enterprises. Once privatized, companies did not have banking systems that were able to finance their investment and operating costs. The weakness of the banking environment in terms of capitalization and fear of financing risk left enterprises vulnerable and underdeveloped. Since 1995, supporting measures have been concentrated on the creation of an inciting tax and legal environment to attract foreign direct invest-



ment and to offer formal guarantees by signing bilateral agreements of reciprocal protection of investments.

Table 3 shows the strong correlation between money supply, financing of the private sector, difference between rate of lenders and borrowers, and the poor performance of Armenia, whose choice of restrictive monetary policy limits the availability of investments. The consequence is that these limited resources are directed toward the most lucrative areas instead of those that would produce wealth and growth most effectively. Nearly 90 percent of bank credits constitute short-term borrowing and do not correspond to the financial needs of enterprises.



**FIGURE 6. Gross domestic product structure by sector (2004 compared with 1990).**



TABLE 3. Efficiency Structure

	Financial intermediation (% gross domestic product)				Cash money in % of deposits		Efficiency interest rate spread in %	
	Broad money		Credit to private sector		1995	2001	1995	2001
Armenia	8	13	4	9	163	70	49	12
Russia	17	23	8	15	42	39	218	13
Estonia	25	43	15	28	54	21	10	4
Poland	34	47	12	25	23	13	7	6
Chile	39	46	52	65	9	7	5	6
Malaysia	85	107	83	109	11	7	2	3

Source: *International Financial Statistics, International Monetary Fund January 2003 in Armenia: The Road to Sustained Rapid Growth, Cross-Country Evidence*, Garbis Iradian, International Monetary Fund Working Paper.

TABLE 4. Determinants of Growth: Armenia in a Comparative Global Perspective

	Armenia (1996–2001)	Baltics (1996–2001)	China (1991–2000)	Malaysia (1991–2000)	Commonwealth of Independent States 7 (1996–2001)
GDP per capita	545	2433	665	3720	462
Real GDP growth per capita	7.0	4.9	8.8	6.0	4.3
Gross fixed investment/GDP	20	23	34	35	19
Domestic investment	15	17	30	29	15
Net foreign direct investment/GDP	5	6	4	6	3
Inflation	5	6	7	4	24
Government consumption/GDP	11	21	13	12	16
Broad money/GDP	12	29	122	88	13
Private credit/GDP	8	18	95	90	8
Secondary school enrollment	86	86	62	67	77

Source: International Monetary Fund. Note: GDP = gross domestic product.

TABLE 5. Investment and Savings (in percentage of gross domestic product)

	1995	1996	1997	1998	1999	2000	2001	2002
Gross domestic investment	18.4	20	19.1	19.9	17.9	19.7	19.2	21
Public	6.8	4.1	3.5	4.9	4.6	3.8	3.9	5
Private	11.8	15.9	15.6	15	13.3	15.9	15.3	16
Gross national savings	2.7	6.2	1.5	-1.3	1.3	5.1	9.8	14.8
Public	-1.6	-2.0	-1.4	0.8	0.1	-1.0	1.3	3.8
Private	4.3	8.2	2.9	-2.1	1.2	6.1	8.5	11.0
Foreign financing (gross domestic investment-gross national savings)	15.7	13.8	17.6	21.2	19	14.6	9.4	6.2
Public	-8.4	-6.1	-4.9	-4.1	-4.5	-4.8	-2.6	-1.2
Private	-7.3	-7.7	-12.7	-17.1	-14.5	-9.8	-6.8	-5.0

Source: National Statistical Service, International Monetary Fund.

In spite of the dynamism and the aptitude for business in Armenia, the shortage of financing remains very restrictive for the development of industry- and technology-oriented activities.

Table 4 shows that the growth that followed the depression was induced by an adjustment, or catching-up effect. The level of investment in Armenia is closer to the average of the seven low-income CIS countries rather than of that of the emerging economies in Asia. The gap is even larger when looking at the financing resources for growth and investments (see table 5). On the other hand, the level of education measured—by the rate in secondary schooling—in Armenia has characteristics closer to the emerging economies in Asia.

It is also necessary to talk about corruption, which is prevalent in Armenia. It is difficult to appreciate its harmful effect on the business environment. Concerning corruption, Alexis de Tocqueville remarked in *Democracy in America*,

In aristocratic governments the individuals who are placed at the head of affairs are rich men, who are solely desirous of power. In democracies statesmen are poor, and they have their fortunes to make. The consequence is that in aristocratic States the rulers are rarely accessible to corruption, and have very little craving for money; whilst the reverse is the case in democratic nations... The corruption of men who have actually risen to power has a coarse and vulgar infection in it which renders it contagious to the multitude. On the contrary, there is a kind of aristocratic refinement and an air of grandeur in the depravity of the great, which frequently prevent it from spreading abroad.<sup>17</sup>

Corruption is not a situational phenomenon, even if periods of economic difficulty can accentuate it; corruption is structural and represents a grave threat to the authority and credibility of the state. According to the Business Environment and Enterprise Performance Survey,<sup>19</sup> the bribes paid by companies to civil servants to solve their administrative issues dropped between 1999 and 2002. The percentage of their revenues devoted to paying bribes decreased from 3.75 percent to 1 percent.

The Organization for Economic Cooperation and Development (OECD)<sup>20</sup> carried out a comparative study on the underground economy—quite a different problem from corruption—and showed how dynamic it is (see table 6). The report is worrying because it shows that the underground economy grew in all the post-Soviet republics between 1990 and 2001, despite the reprise in growth. Measures are being undertaken by the WB and the government to reduce this phenomenon in the most vulnerable areas such as customs, taxes, and the police force.

An awakening to the threat that these phenomena represent to equity would be desirable.

### **Creating New Trade Dynamics**

Substitution of imports, which was the engine of growth from 1994 to 1998, cannot be a long-term opportunity. This strategy is limited because it is dependent on domestic demand, which is limited in Armenia. To benefit from the same level of growth, the strategy of growth must be redirected toward activities for which a relative advantage and an external demand exist. In an open economy, the

**TABLE 6. Underground Economy Structure**

Country	Share of underground economy (in % of gross domestic product)				Labor in the shadow economy (in % of the working-age population)
	Physical Indicators		DYMMIC		
	1990–93	1994–95	1990–93	2000–01	averages
Armenia	39.4	40.3	40.1	45.3	40.3
Georgia	43.6	63	45.1	66.1	53.2
Azerbaijan	33.8	59.3	45.1	60.1	50.7
Russia	27	41	27.8	45.1	40.9
Ukraine	38.4	47.3	29.4	51.2	41.2
Latvia	24.3	34.8	25.7	39.6	29.6

*Source. The Development of the Shadow Economies and Shadow Labor Force of 22 Transition and 21 OECD Countries. Working paper by Friedrich Schneider, Linz University.*

emerging economies must adjust their advantage toward a strategy of export promotion. The resource of immediate export is raw materials, which is what Russia, Kazakhstan, Azerbaijan, and others export. Oil-exporting countries benefit from a steady increase in the price of their export.

The structure of exports in Armenia was consolidated between 1998 and 2003 with a group of products made up of cut and industrial diamonds, which amounted to more than 30 percent of exports. However, the rate of added value of these products is weak (about 12 percent) and does not allow significant potential for growth (see table 7a and 7b).

Between 2000 and 2002, a second group of products developed with the agro alimentary industry, which exports 23 percent of its production and has better prospects for growth. Nevertheless, the structure of exports remains fragile for several reasons. Seventy percent of exports are made up of five groups of products, including 30 percent for diamonds. For some exported items, such as scrap metals, Armenia does not have a comparative advantage and thus offers limited prospects. Many established production capacities do not take part in the export effort, and the prospects for new markets are not yet visible. Exports take part in the growth in a proportion less important than the substitution for imports. Growth of the GDP will exceed that of domestic demand only with an increase in export capacity.

As it was previously stated, this strategy is dependent on investment. Companies with advanced technological prowess have a distinct advantage. A good example is the Mshak Company, which specializes in numeric-control computing systems. Since 1994, the company has exported solutions for the design of complex industrial pilots. It is currently one of the five suppliers of the pilots to the Russian market.

**TABLE 7A. Foreign-trade Structure (in millions of dollars)**

	1999	2000	2001	2002	2003
Total exports	233	300	342	505	686
to CIS	24.3%	24.4%	26.1%	19.1%	18.8%
to non-CIS	75.7%	75.6%	73.9%	80.9%	81.2%
Total imports	-813	-893	-877	-987	-1279
to CIS	23.1%	19.6%	24.9%	30.6%	22%
to non-CIS	76.9%	80.4%	75.1%	69.4%	78%
Deficit	-580	-593	-535	-482	-593

*Note.* CIS = Commonwealth of Independent States.

**TABLE 7B. Import and Export Community Structure**

Import structure by commodities (%)	2003	Export structure by commodities (%)
14.0	Precious and semiprecious stones	51.2
10.5	Precious and nonprecious metals	13.1
26.0	Minerals	7.3
5.9	Equipments	2.9
6.1	Finished foods	10.5
7.3	Textiles	4.5
2.3	Plastic products	0.0
28.0	Others	10.5

*Source.* Statistics Administration of Armenia.

The structural reconfiguration of the Armenian economy is a long and continuous process. Various statements by Prime Minister Andranik Margaryan and President Robert Kocharian indicate that they want to secure investments that would equip Armenia with technological capacities which would enable it to obtain new relative advantages.

The development of industry also depends on investment. During the period of stabilization from 1994 to 1998, the share of industry in the GDP was 15.9 percent. This figure was 17.9 percent between 1999 and 2002.

### **Coordination of Fiscal and Monetary Policies**

The budgetary reform that took the longest to produce results was the collection of taxes, which improved in 2003 and 2004. Nevertheless, the revenues from taxes remain stable at 17.8 and 17.2 percent of the GDP during those years.

With the improvement of the economic and budgetary situation since 2000, the deficit has been reduced to a level of quasi-equilibrium largely due to grants and external funding (see table 8).

The budgetary funds in the accounts of the treasury recorded strong growth and represented about 16 percent of the monetary base in 2003. The movements on these accounts caused important variations in monetary policy indicators and led to the control of disbursements from these funds. This risked provoking conflict between monetary policy and the objectives of budgetary policy to fight

**TABLE 8. Consolidated Budget Operations on a Commitment Basis (in percentage of gross domestic product)**

	1997	1999	2000	2001	2002	2003	2004
Total revenues and grants	19.4	23	19.8	20.2	22.4	21.5	19.4
Total revenues				19.4	18.9	18.3	18.7
Tax revenues	13.3	16.8	15.4	17.8	17.8	17.2	17.2
Non tax revenues	1.4	2	1.3	1.4	1	0.9	0.8
Capital revenues				0.2	0.2	0.2	0.6
Total grants	1.8	1.5	0.8	0.8	3.5	3.2	0.7
Current grants				0.8	0.3	0.7	0.5
Capital revenue grants				0	2.2	2.5	0.2
Total expenditures and net lending	24	28.2	24.6	24.7	23.3	22.4	21.6
Current expenditures of which are	14.8	17.6	15.7	19.6	17.9	16.7	16.9
interests payments	2.5	2	1.3	1.3	1.2	0.7	0.5
Capital expenditures of which are	3.4	4.4	3.8	3.7	4.7	5.2	4.1
capital grant financed				0	2.2	2.5	0
Net lending				1.4	0.8	0.4	0.6
Overall balance	-4.6	-5.2	-4.8	-4.5	-0.9	-0.9	-2.2
Financing				0.5	0.9	0.9	2.2
Domestic sources	-0.4	0.5	2.6	1.4	-1.8	-1.5	-0.2
External sources	5	4.7	2.2	3.2	2.7	2.4	2.4
Social expenditure				9.2	1.8	7.9	9.4
Primary balance				-3.3	0.3	-0.2	21.1

Source. Ministry of Economy and Finance, Armenia.

poverty. However, this dilemma was solved in 2004, at the detriment of budgetary expenditure, which was supposed to maintain the initial objectives of a 7 percent increase in money supply and a 3 percent increase in inflation after an increase in the supply of money in 2003.

An important observation is in place in this connection. Dollarization in Armenia has reached 49 percent, one of the highest in the CIS.<sup>21</sup> This phenomenon can be explained by the following:

- the high level of remittances from Armenians in the diaspora in foreign currencies, tourism, and concessionary credits from IFIs or grants such as those from the Lincy Fund, the charitable organization established by the Armenian-American billionaire Kirk Kirkorian;
- the differential of real interest rates between the dram and the dollar, which remains important even if when accounting for a decrease;
- the strong rate of economic opening with imports to about 50 percent of the GDP; and
- the lack of alternatives for the use of the dram and the weak growth of dram resources (see table 9).

The increase in these flows of the dollar peaked in 2004, despite the dollar's depreciation, and led to a considerable appreciation and relative stability of the *dram*. Nonetheless, there is a manifest preference for the dollar by enterprises. Dollarization represents a loss of seigniorage revenues for the state and a risk of instability in the event of a crisis. The authorities in charge of monetary policy try to keep credit levels in line with inflation targets, while ensuring a sufficient amount of liquidities for the payment of current operations.

### **Redistribution of Growth and the Polarization Phenomenon**

The rise of social inequality and unequal distribution of income is one of the general characteristics of post-Soviet economies. In the case of Armenia, this proves that a healthy set of macroeconomic indicators in the context of strong economic growth can be compatible with high levels of poverty and a low level of redistribution and circulation of economic resources.

In August 2003, Armenia adopted the Poverty Reduction Strategy Paper (PRSP), and put it into action in January 2004. This plan reflects the emphasis placed by the WB and the IMF on their policy regarding structural adjustment on the importance of poverty and its negative consequences on economic growth.<sup>22</sup>

A survey of households regarding the use of their budgets noted, a decrease of the average level of poverty from 55.1 to 42.9 percent within the general population between 1999 and 2003.<sup>23</sup> However, when poverty diminished in both urban and rural areas,<sup>24</sup> the gap in incomes between segments of society widened with a differential of 51.4 percent.

Large families with young children aged 14 and below remain the most vulnerable. The situation of the pensioners has seen the most improvement. A reduction of income inequalities would be also observed with the decrease of the standard deviation of incomes between the quartile of richest and that of poorest.



TABLE 9. Main Indicators of Poverty (1999–2003)

Indicators	1999	2001	2002	2003	2003/1999 (%)	2003/2001 (%)
Average annual incomes of population <sup>a</sup>	95.1	134.6	117.4	159.9	+68.1	+18.8
Annual average expenditures of population <sup>a</sup>	140.4	143.4	143.8	172.8	+23	+20.5
Annual average incomes of the richest quantile <sup>a</sup>	423.5	474.2	385.5	429.37	+16.2	-9.6
Annual average expenditures of the richest quantile <sup>a</sup>	340	347.3	339.3	389.4	+14.5	12.1
Annual average incomes of the poorest quantile <sup>a</sup>	14.1	27.4	26.4	37	+162.4	+35
Annual average expenditures of the poorest quantile <sup>a</sup>	50.1	51.8	53.6	72.5	+44.7	+40
Gross domestic product per capita	\$305.8	\$365.8	\$424.2	\$505.5	+65.3	+38.19
Population below poverty line (% of total population)	55.1	50.9	49.7	42.9	-22.14	-15.7
Incomes of poorest quantile in % of the richest	3.6	5.9	6.8	7.5	+108	+27.11
Gini coefficient <sup>b</sup> of income concentration	0.593	0.535	0.451	0.438		
Structure of income	100	100	100	100		
Labor income	35.19	42.33	53.21	55.2		
Social transfers	9.33	9.61	11.53	9.91		
Income from sales of agricultural products	32.11	15.64	6.4	12.69		
Transfers	19.32	18.55	18.7	15.86		
Other incomes (including property revenues)	4.05	13.87	10.16	6.34		

Note. <sup>a</sup>x 1000 dram/capita. <sup>b</sup>The Gini coefficient is a measurement of the degree of inequality of the distribution of income in a given society. This coefficient is a variable number from 0 to 1, where 0 means the perfect equality (everyone has the same income) and 1 means the perfect inequality (one person has all the income, the others do not have anything). Historically, highly egalitarian countries have a coefficient of about 0.2; the less egalitarian countries in the world have a coefficient of 0.6. Source: National Statistics Service, PRSP Projections.

These results reveal the chronic gap in the budgets of the poorest households whose expenditures are higher than their incomes, even when the progression of their incomes is higher than that of their expenditures. The PRSP does not explain how these households manage their budgets. Nonetheless, the share of income from labor in these households increased by 35 percent between 1999 and 2003, to the detriment of other forms of income. These increases in income are the result of economic growth in 2003 and 2004, 13.9 percent and 10.1 percent respectively. The social objectives assigned to the budgetary policies and were included in the PRSP.

From 2004 to 2007, expenditures in education are projected to increase from 2.4 to 3 percent of GDP; in health from 1.5 to 1.9 percent; and in the social security system from 2.2 to 2.4 percent. PRSP estimates that these results equal those of the last years of the Soviet Union and comparable rates to those of Europe will be reached by 2015. Armenia will have to solve the problem of polarization. The quality of education and health care will determine whether economic growth will be sustainable.

### **The Weight of Regional Tensions**

Regional tension has placed constraints on the potential growth of Armenia, the most isolated country in the South Caucasus. The immediate problem for Armenia is the economic blockade by Azerbaijan and Turkey; whose cost is estimated to be between 10 and 30 percent of GDP. The second question is that of regional instability.

To think about sustainable growth in Armenia without talking about regional stability is difficult. The size of the three countries of the Caucasus—Armenia, Azerbaijan, and Georgia—and their geographical interdependence should compel us to consider regional stability as a key factor for the long-term growth of all three. There have been attempts to ensure that diplomacy prevails over the danger of an escalating uncontrolled violence, to alleviate tensions, and to create a political framework conducive to the resolution of grievances.

The ideal solution would be to promote conflict-prevention, which would lead to the creation of a community in the South Caucasus that combines elements of shared sovereignty, coordination, cooperation, and equality between national and cultural communities. A geographical rapprochement with Europe, with the eventual integration of Turkey, could exert a favorable influence on the search of a concerted solution. Let us not forget that the founders of Europe wanted to create the conditions for a lasting peace, which became a reality.

After an outcome that would have moved Armenia and Azerbaijan in this direction, it is necessary to follow such a path because the Caucasus remains an area of major strategic importance. Russia and the United States measure their influences in this region while being involved in the process of stabilization. Conflicts of interest and of objectives have their fault lines in the area; on one side are Georgia and Azerbaijan (and other countries of the GUUAM<sup>25</sup>) close to the United States, and on the other are Armenia and Iran with close relations with Russia.

In this context, when peace rhetoric and geopolitical interests are mixed, the

prospect of a growing rapprochement to Europe could exert a positive influence on the area because Europe is an atypical political entity compared with the United States and Russia. European influence could also remain limited because of a lack of the necessary means and prerogatives to assume a political and strategic role.

The promotion of a stability pact would be incumbent on creating a free-trade zone, which could become a precondition to possible integration in the EU. The important measures to be registered in this pact would be geared toward three priorities: security, resumption of trade, and the maintenance of credibility necessary to the resumption of investments. The success of such a pact will depend on the substance of the relations between the European Union, Russia and the United States and inspires hope that the Caucasus can become a test case for transatlantic solidarity.

### Conclusion

The economic growth of Armenia expressed in GDP per capita was one of the strongest in the CIS. GDP went from \$350 to more than \$800 on average between 1995 and 2003. Three principal factors explain this result: the credibility of the macroeconomic policies of stabilization, the correction effect following the depression, and the importance of external transfers, in particular since 2000.

The intensity of the economic changes has been considerable. If the period of growth recorded since 1995 was due to the investments in the initial phase of the transition and to a better allowance of the available resources, growth in the long term will be determined by the investments intended to renew the lack of capital in Armenia. The level of domestic and foreign investment will play a decisive role toward the achievement of this goal. Economic policy will have to continue the structural reforms by accentuating the reinforcement of the banking intermediation in the financing of the economy. There must be improvement in the business environment and positive incentives for entrepreneurs to initiate projects. Attracting foreign investments, supporting innovation and devising a strategy to promote exports will be essential to maintain growth rates higher than 6 percent.

In the current geopolitical context, any advance toward peace and stability in the area will improve the overall performance of the country and raise the standard of living. If these objectives are achieved in the medium term, Armenia will finally be able to benefit from the potential advantages of its geographical location. If Europe overcomes its difficulties and finds the means to expand without weakening, the prospect of a rapprochement and integration with Europe would anchor the region in a zone of greater stability.

### NOTES

1. The Soviet net material product is the statistical equivalent to the GDP.
2. These loans were negotiated largely from 1992 to 1994.
3. The mechanic consequence of the collapse of industry is the second factor. Even without the growth of agriculture output, its relative share should have increased.
4. In the analysis of the crises and fluctuations of the growth, the economists often

evoke the concept of “creative destruction” of Joseph Schumpeter. It means that the advent of new mode of growth is obtained at the price of the destruction of the precedent. These moments are concomitant, even connected, in the case of post-Soviet economies; the effects of creation were not the engine in the process of destruction.

5. Special Drawing Rights (SDR) is an international reserve asset, created by the IMF in 1969 (1SDR = \$0.577).

6. The European Union was present in Armenia with its program of technical assistance, TACIS, evaluated at nearly 90 million between 1991 and 2002.

7. Terminology ascribed to John Williamson who, in 1989, said that there are ten points that should guide the economic transition. These are similar to the consensus reached between the Congress of the United States, the IMF and the WB. These ten points are: budgetary discipline, reorientation of the public expenditure, tax reform, financial liberalization, adaptation of a rate of single and competitive exchange, liberalization of exchanges, elimination of barriers to foreign direct investment, privatization of companies, regulation of the markets to ensure the elimination of import and export tariffs, and final safeguards for rights of private ownership.

8. This reopening, negotiated hard with the International Atomic Energy Agency and other multilateral agencies, was not without risks for the country. It was the first time that a nuclear power station was returned to service after a long period of interruption. The plant closed in 1989, after the earthquake of December 1988.

9. The Public Investments Program is the tool of choice regarding public investment.

10. The legislative field was supplemented in 1997 with a bankruptcy law intended to address the problem of enterprises that were not profitable and had attracted no buyers.

11. The request for privatized credits (DA) is carried out in the form of monetary transactions (TM) with the most liquid direction of and transaction banknotes in vouchers (TV) so that:  $DA = TM + TV$ , thus DA can absorb the offer of privatized credits OA such as  $DA = OA$ .

12. Within the borders of the ex-Soviet Union.

13. From 1998, many Western companies acquired Armenian companies, the cognac factory by Pernod-Ricard (France), telephony by EXCEPT (Greece), the National Company of Electricity and the nuclear thermal power station by Russia, and the Yerevan import by Argentinian investors.

14. Created by the decree of September 30, 1994.

15. These transfers increased to approximately \$152 million in 2003.

16. See, IMF and WB Recent Policies and Performance of the Low-Income CIS Countries. An Update of the CIS-7 Initiative, April 23, 2004.

17. The Agricultural Cooperative Bank of Armenia, created in 1994 with the assistance of the European program TACIS, has played a key role in the development of agriculture. The repayment rate of credits by the clients was higher than the current international standards. This performance has been, unfortunately, rare.

18. Alexis de Toqueville, *Democracy in America, Volume 1* (New York: Random House, 1990), 226.

19. Business Environment and Enterprise Performance Survey was conducted by the EBRD and the World Bank in 1999 and 2002. The survey is available at <http://info.worldbank.org/governance/beeps/>.

20. Friedrich Schneider, “The Development of the Shadow Economies and Shadow Labor Force of 22 Transition and 21 OECD Countries” (working paper, Linz University, Linz, Austria).

21. Measured by the share of deposits in currencies in the money supply, Armenia has the second highest rate after Azerbaijan (54 percent); the lowest rates among transition economies are those of Slovakia (10.6 percent) and the Czech Republic (9.4 percent).

22. This new sensitivity followed severe criticisms of existing policies beginning with the Asian crisis, in particular by its vice president and chief economist, Joseph E. Stiglitz, who resigned as a sign of protest.

23. The sharpest decline in poverty has been in Yerevan, accentuating the difference between the capital and other cities. On the other hand the region where the rate of poverty is the greatest is Shirak with 72.2 percent, Gegharkunik is the only area where poverty increased between 2003 and 2004.

24. GUUAM (Georgia, Ukraine, Uzbekistan, Azerbaijan, and Moldova) Group was formally founded in November 2000 as a political, economic and strategic alliance close to the United States. It was designed to strengthen the independence and sovereignty of these former Soviet Union republics.