

ASSESSMENT OF STRUCTURAL GAPS IN ARMENIA BASED ON THE GLOBAL COMPETITIVENESS INDEX



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ASSESSMENT OF STRUCTURAL GAPS IN ARMENIA BASED ON THE GLOBAL COMPETITIVENESS INDEX (WITH A FOCUS ON STRUCTURAL LIMITATIONS AND POSSIBLE LABOR MARKET POLICY MEASURES)¹

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Financial loans from the Eurasian Fund for Stabilization and Development (EFSD) are the key instruments for maintaining an efficient dialogue with borrowing countries on key economic policy measures. A prudent well-targeted matrix of policy measures coordinated with the authorities is essential to the success of budget support programs, and it requires a deep understanding of the macroeconomic, structural, and institutional limitations existing in the economy.

EFSD's experience in implementing a budget support program for Armenia in 2015–2017 showed that, although the program attained its main objectives, some structural problems remained and represent a considerable hindrance to the economic growth potential, particularly as regards the labor market. Overcoming these problems requires a set of measures based upon a deeper understanding of both their nature and government's capacity to implement them.

To better adapt recommendations on structural policy measures to the Armenian context, the EFSD experts used the methodology of the International Monetary Fund³, that helps assess the economy's structural gaps by comparing the World Bank's structural and institutional reform rating for Armenia with those of countries with comparable levels of income as well as with countries that have implemented reforms successfully.

The analysis of structural gaps in Armenia helped identify areas of reform that are successful and those that are lagging. Specifically, the comparison with Georgia, reveals underperformance in the fields of institutional development, infrastructure, and financial markets.

¹ Disclaimer – the article reflects the authors' personal opinion, which may not coincide with the official position of the Eurasian Development Bank, the manager of the Eurasian Fund for Stabilization and Development.

² The author is especially grateful to Sergei Ulatov (Economic Advisor, EFSD) and Tigran Kostanyan (Acting Director for Financial Credit Department, EFSD) for their useful comments, recommendations and edits.

³ For details see (Funke et al, 2017).

Also, this analysis has helped to identify more targeted recommendations on policy measures to overcome the structural limitations in the labor market and reduce the lag with countries that advanced in reform implementation. Among these, the key measures might include:

- strengthening anti-monopoly legislation by broadening opportunities for the investigation of offences against economic competition; introducing an 'affiliate' detection methodology; implementing the assessment of draft laws' regulatory impact, etc.; and
- broadening women's economic involvement by amending the Government's motherhood protection policy.

The analysis also helped detect bottlenecks in other areas of reform that are lagging in Armenia but which may have a considerable positive impact on the potential growth rate and the economy's competitiveness, e.g.

- increasing labor productivity growth through the implementation of new approaches to vocational training; and
- improving corporate governance.

Although this analysis requires some fine-tuning (given the novel methodology used), it may be useful for improving the quality of dialogue and consultations with the Government of Armenia on future areas of reform and, consequently, for ensuring more efficient provision of financial loans for budget and balance of payments support, if needed.

MOTIVATION AND METHODOLOGY

It is increasingly understood that the implementation of structural reforms is a key factor of sustainable economic growth. Developing countries are obviously in need of structural reforms, for the process of transition to a market economy is not yet finished in many countries. On the other hand, after the 2009 crisis even developed economies faced the limited reach of the existing fiscal and monetary growth stimuli. In this situation, according to leading international financial organizations⁴, it is structural reform that becomes the key element of a successful economic policy. Its implementation helps accelerate economic growth, generate more income for the State budget and, consequently, reduce the debt burden.

Despite the successful completion of the EFSD budget support program in Armenia, significant structural imbalances remain in the country, mainly in the labor market, with low economic involvement of women and productivity growth problems. The persistence of the above imbalances after the successful implementation of an extensive matrix of structural policy measures points to the need to specify more accurately the main thrust of

⁴ See

- (G20 Communiqué, 2015)
- (IMF, 2015)

the policy measures being developed. Hence, the main purpose of this research note was to address the following key questions:

- 1) What is the current status of the structural imbalances in the national economy?
- 2) What areas of reform will help achieve the most efficient convergence with countries that are successful in the structural reform area, including the labor market?
- 3) What policy measures by the authorities have had an effect on the change of structural imbalances?
- 4) Is it possible to complement the structural policy measures planned by the authorities in key areas of reform with those suggested by IFOs?

To answer the first two questions, we used an IMF pilot methodology (Funke et al., 2017)⁵. This innovative method uses panel regression on data of the WB Global Competitiveness Index (GCI) – a vast set of assessments of structural imbalances in economies participating in the WB World Economic Forum (WEF) (see Box 1). Panel regression assesses the dependence of the values of the WB Global Competitiveness Index and its subindexes on per capita income and a number of fixed effects (being a commodity exporter, geographical location, membership in economic and political blocs, etc.). The results obtained are used to calculate the deviations of the actual values of the global competitiveness subindexes for the countries under scrutiny from their panel assessments. Assessments exceeding actual CGI data indicate that the country lags behind others with a comparable level of incomes in structural reform implementation (see Box 2).

The answers to the third and fourth questions permit more thorough elaboration of potential structural policy measures. Hence, in addition to econometric evaluation of structural reform success indicators, this note examines the structural policy measures implemented by the authorities to explain the trends in the WB GCI subindexes observed. This made it possible to detect a number of changes in structural imbalance data that are unrelated to the authorities' actions. Also, a detailed study of the measures and policies used helped prepare a more focused set of recommendations for discussion with the authorities.

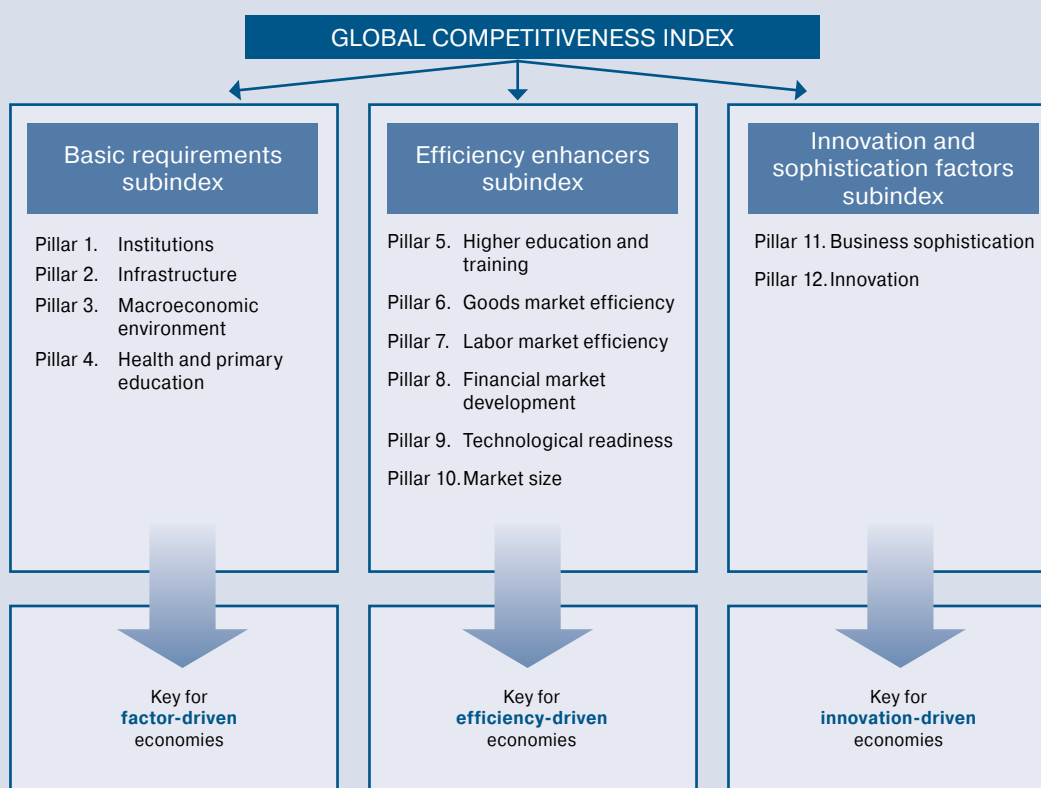
Box 1. Global Competitiveness Index of the World Bank

The WB concept of the assessment of an economy's competitiveness builds on methods suggested by Professor K. Schwab in 1979⁶, that have laid a methodological basis for annual studies in the last 40 years. This approach hinges on the message that a certain set of institutions, authorities' policies and economic productivity factors determines the potential level of the national economy's well-being.

Since 2005, annual CGI studies have used quantifications whose methodology was proposed in (Sala-i-Martin, 2006). This approach was used to assess the aggregate GCI for 12 areas (pillars) of structural reform and macro stability. In turn, those assessments were similarly obtained as aggregates of 114 more detailed subindexes composed of the results of business community surveys and national economies' statistics. The polls of businessmen are held under WB WEF auspices and cover 137 countries, or 98% of world GDP.

⁵ (Funke et al, 2017).

⁶ (Schwab et al., 2017).

Figure 1. Structure of the Global Competitiveness Index

Source: (Schwab et al., 2017)

The structure of the aggregate GCI is directly dependent on the country's economic development stage: with the growth of per capita GDP the weights of the innovation and sophistication related pillars increase while basic ones' weights decrease.

Table 1. Economy Development Stages and Parameter Weights

	Stages of Development				
	Stage 1: Factor-driven	Transition from Stage 1 to Stage 2	Stage 2: Efficiency-driven	Transition from Stage 2 to Stage 3	Stage 2: Innovation-driven
GDP per capita (USD)	Less than 2,000	2,000–2,999	3,000–8,999	9,000–17,000	More than 17,000
Weight for basic requirements	60%	40–60%	40%	20–40%	20%
Weight for efficiency enhancers	35%	35–50%	50%	50%	50%
Weight for innovation and sophistication factors	5%	5–10%	10%	10–30%	30%

Источник: (Schwab et al., 2017)

1. CURRENT STATUS OF STRUCTURAL REFORM IN ARMENIA

The analysis of the current status of structural reform is based on identifying the difference between the WB GCI aggregate indicators (pillars) for Armenia and other countries with comparable levels of income (see Box 2 for details of the assessment methodology). Georgia was chosen as the latter as one of the most advanced post-Soviet countries in terms of structural reform.

Box 2. Econometric Assessment of Structural Reform Gap

The structural reform gap is assessed as the normalized difference between the actually observed values of indicators (indexes, subindexes, pillars, etc.) and estimates thereof. The latter were calculated from the results of panel regressions using the methodology suggested in (Funke et al., 2017). The difference was normalized for the value of the standard deviation of the respective regression's residuals.

The variables being explained are indicator parameters that explain: per capita level of GDP in U.S. dollars at purchasing power parity based on 2010 prices, and a number of dummies. The latter include: location in the ECA region, OECD membership, the country's location in Africa, the economy's dependence on exports of natural resources, etc.

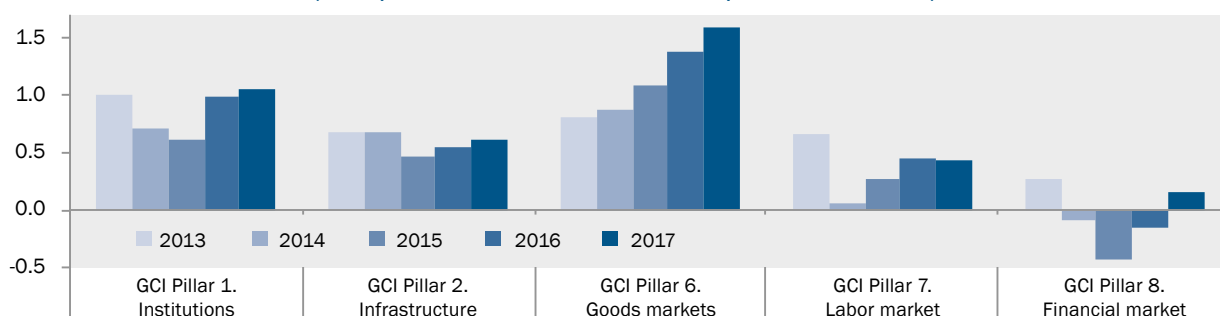
The above parameters are significant at a 10% significance level for all the aggregated pillars. The assessment of gaps in the disaggregated labor market indicators led to the exclusion of some dummies (most often, dependence on natural resources and OECD membership) as their statistical significance decreased.

The observation sample includes 2007–2017 data on 137 countries – 1,395 observations. The data were taken in natural logarithms.

In the case of comparison with an individual country's indicators, the differences between the logarithms of those countries' indicators were used, normalized for the standard deviation of those indicators from the respective panel regression.

The analysis focused on the Basic Requirements and Efficiency Enhancers category subindexes, for WB experts consider progress in these very areas to be the most important for developing countries⁷. Also, the macro stabilization, health, education and political science pillars were excluded from the remaining set of subindexes (for this study has a different mandate).

**Diagram 1. Structural Reform Gaps in Armenia
(Compared to Countries with Comparable Incomes)**

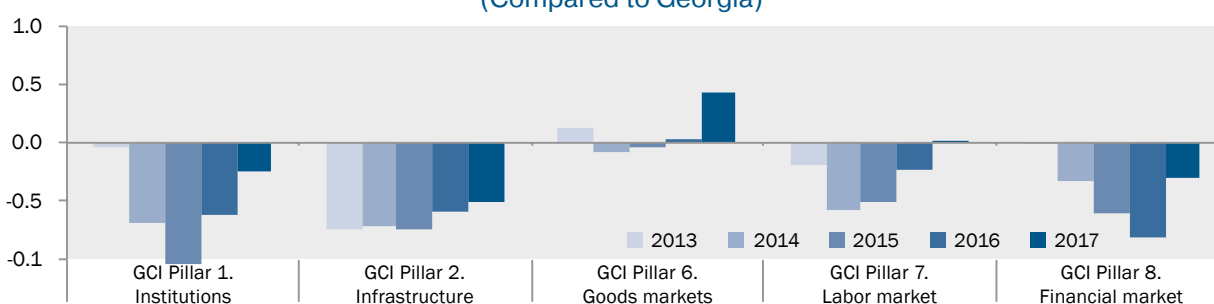


Source: authors' calculations.

⁷ See (Sala-i-Martin, 2006).

The assessments obtained indicate that the structural reforms in the Republic of Armenia are ahead of similar reforms in the countries selected for comparison⁸, whose goods markets, institutions, infrastructure, and labor markets are often less developed. The development of its financial markets is generally in line with global trends or ahead. The implementation of some Institutions pillar reforms was supported by the EFSD program in the RA. In particular, EFSD funds were used to support the Government's measures taken to develop and enact the RA's first Tax Code; reduce financial risks in the energy sector by adapting the tariff methodology to potential energy generation and distribution shocks; reform the State finance system by increasing the share of electronic tenders in competitive State procurement; and raise the efficiency of social expenditures by creating territorial integrated social service centers.

**Diagram 2. Structural Reform Gaps in Armenia
(Compared to Georgia)**



Source: authors' calculations.

In comparison with the level of the structural reform implemented in Georgia (as the most advanced reformist country in the region), Armenian businessmen's assessments point to the reforms being slow in three of the five areas (the Institutions, Infrastructure, and Financial Market pillars). Business considers the labor market reform to be equivalent to Georgia's level, and the goods market reform to be above it⁹.

The analysis of the current structural reform situation in the country will be further supplemented with a review of the authorities' policy and an assessment of its impact on the structural gap figures obtained.

Pillar 1. Institutions

A country's institutional development includes a whole set of parameters, of which legislation quality and legal practices by both public and private agents are the most important. The State's legislative and administrative system affects investment decisions and competitiveness. Besides, private institutions' efficiency is important for sustainable development: both investors' and consumers' confidence is based on enterprises' good and truthful reporting.

⁸ The countries with comparable per capita income include some ten countries, of which Georgia, Indonesia and Mongolia are the most significant.

⁹ Mainly due to RA's accession to the EAEU in 2015.

In comparison with *comparable income countries* (see Diagram 1) the Pillar 1 indicator is in positive territory – that means, above the level of institutional development in countries with comparable incomes. The 2013–2017 data showed a minor improvement on average. In 2016–2017, the indicator improves considerably after a marked setback.

In comparison with *Georgia* (see Diagram 2) the indicator is in negative territory, meaning that Armenia lags behind the Georgian level of institutional development. The 2013–2017 data showed an insignificant deterioration on average: in 2016–2017 the indicator improves after a deep setback.

The indicator's movements were driven by a number of competing factors:

- ↓ The decrease in 2014–2015 was mainly on account of worsened assessments by business of public finance performance. This might presumably reflect the aggravation of corruption and favoritism as perceived by most businessmen. Those assessments are confirmed by an analysis using WB WGQI methodology: the aggregate government efficiency, corruption and rule of law indicators showed a decrease at the same time.
- ↑ The increase in 2016–2017 was largely on account of a better perception of the corruption situation by business, and improving protection of property rights and equality of rights. The better perception of the situation by business was due to accession to the EAEU in 2015, changes in electricity pricing in 2015–2016¹⁰, reform of the public finance system in 2015–2017¹¹, enactment of the first Tax Code in 2018¹² and the effectiveness of social expenditures raised by creating integrated territorial social service centers.

Pillar 2. Infrastructure

Well-developed and efficient infrastructure is necessary for a sound economy. Efficient transportation facilitates both production processes and labor mobility; a modern economy cannot work without trouble-free power supply, and reliable communication systems are needed for prompt exchange of information, which is a basis for the growth of economic efficiency.

In comparison with *comparable income countries* (see Diagram 1) the Pillar 2 indicator is in positive territory – that means, above the level of infrastructural development in countries with comparable incomes. Comparison for 2013–2017 showed an insignificant deterioration, with a sharp worsening in 2015 not fully offset by the ensuing growth of the indicators.

In comparison with *Georgia* (see Diagram 2) the indicator is in negative territory, meaning that Armenia lags behind the Georgian level of infrastructural development. The 2013–2017 data showed an insignificant improvement on average: in 2016–2017 there was a visible improvement after a shallow recession. The indicator's movements were driven by the following competing factors:

¹⁰ Including the granting of demands for an independent audit of the situation in the country's biggest power grid company.

¹¹ Including the new public procurement law that approved the use of electronic tenders for competitive deals.

¹² This measure should considerably reduce tax administration expenses for business, make tax payment assessment more transparent, establish equal terms of competition and increase the State budget's income by legalizing economic agents.

- ↑ The 'open skies' policy introduced since 2014 has increased the number of airlines allowed to fly to Yerevan, which enhanced competition and reduced air fares considerably. In addition to the obvious benefit for the local population, two-digit rates of growth of international tourist traffic to Armenia were observed in 2015–2017, which made a positive contribution to economic growth.
- ↓ The paved motorway construction rate is insufficient to meet the country's growing needs; the share of paved roads in satisfactory condition is decreasing despite their annual increase in length. As road transport accounts for some 82% of cargo traffic, its worsening quality affects the quality of all infrastructure.
- ↓ A temporary decrease in the number of seats available on flights was one of the causes behind the decrease in the aggregate transport index, although by 2017 their level already exceeded the 2014 level. The decrease was probably due to the weakening of the Russian ruble exchange rate: the resultant decrease in Armenian labor migrants' dollar incomes cut down on air traffic. As noted in the media¹³, the passenger flow drop at that time (i.e. before the 'open skies' policy was started) led airlines to withdraw from Armenia.
- ↓ Power supply quality decreased temporarily in 2014–2015¹⁴ due to temporary factors: water shortage and planned repairs on the nuclear power plant led to a decrease of electricity generation by 5%.

Pillar 6. Goods Markets

Efficient goods markets are a prerequisite for production growth with both demand and supply limited. Sound market competition is a pre-condition for their continued efficiency, for it preserves the most efficient enterprises.

In comparison with *comparable income countries* (see Diagram 1) the Pillar 6 indicator is in positive territory, meaning that the goods markets in the RA are more efficient than in other countries with comparable levels of income. The 2013–2017 data showed a considerable improvement.

In comparison with *Georgia* (see Diagram 2) the indicator is in positive territory, meaning that it is above the Georgian level of goods market efficiency. 2013–2017 data showed a considerable improvement on average, mainly due to growth in 2016–2017.

The indicator's movements were driven by the following competing factors:

- ↑ Considerable improvement of anti-monopoly regulation resulting from consistent legislative reforms in this area. In particular, a package of amendments adopted to harmonize legislation with the EAEU in 2016 had a positive effect.

¹³ "Авиакомпании покидают Армению. Эксперты утверждают, что сфера не реформируется" (Airlines Leave Armenia. Experts Say the Industry Stays Unreformed), according to Lragir, July 2015, <https://www.lragir.am/ru/2015/07/03/43081/>

¹⁴ Deteriorating poll answers to the question: "In your country, how reliable is the electricity supply (lack of interruptions and lack of voltage fluctuations)? [1 = extremely unreliable; 7 = extremely reliable]".

- ↑ The trade barriers were lowered as Armenia joined the EAEU and signed the Comprehensive and Enhanced Partnership Agreement with the EU in 2017.
- ↑ The tax burden on business was lowered sharply in 2014–2016 as an eased tax administration regime for small and medium-sized businesses was introduced in place of the old programs that included VAT.

Pillar 7. Labor Markets

For maximum labor productivity, the labor markets should be flexible enough to support low-cost inter-industry flows of labor and to prevent wage fluctuations from having any significant social consequences¹⁵. Also, an efficient labor market should lead employers to respect meritocracy and gender equality, required for both reducing outbound labor migration and for attracting workers from abroad.

In comparison with *comparable income countries* (see Diagram 1) the Pillar 7 indicator is in positive territory, meaning that it is above the labor market efficiency level in the countries with comparable incomes. It should be noted that the high level of migration in Armenia is compatible with this statement, for the countries being compared are in a similar migration situation. The 2013–2017 data tended to worsen slightly: a sharp deterioration on 2014 was not fully offset by ensuing growth.

In comparison with *Georgia* (see Diagram 2) the indicator is roughly at the Georgian level of labor market development. 2013–2017 showed an insignificant overall improvement: in 2015–2017 it improved markedly after a strong setback.

This gap's changes over time will be examined in more detail in Sections 2 and 3.

Pillar 8. Financial Market

An efficient financial sector redistributes both national savings and funding attracted from abroad in favor of projects with the highest expected rates of return. This feature of financial markets explains their influence on the growth of the economy's productivity. To be the most effective in their role, banks should be reliable and transparent, and financial mechanisms should be duly regulated so that investors' rights can be protected and legal compliance ensured.

In comparison with *comparable income countries* (see Diagram 1) the Pillar 8 indicator returned to positive territory in 2017. This means it is above the financial market development level in countries with comparable incomes. The 2013–2017 data showed a minor worsening on average: a sharp deterioration in 2014–2015 was not offset by ensuing growth of the indicators.

¹⁵ E.g. wage reduction at local backbone enterprises during a crisis may lead to a significant fall in the regional population's incomes.

In comparison with *Georgia* (see Diagram 2) the indicator is in negative territory, which means lagging behind the Georgian level of financial market development. The 2013–2017 data showed a deterioration on average: in 2016–2017 the indicator improved after a deep setback.

The indicator's movements were driven by the following competing factors:

- ↓ A transition to a conservative monetary policy in 2014–2015 made loans less accessible for Armenian business. The monetary policy has been eased since 2016.
- ↓ A growing share of bad loans (NPLs) resulting from borrowers' problems reduced the banking system's strength and undermined businesses' confidence in it.
- ↑ The RA CB consolidated the banking sector in response to its serious weakening after the 2014–2015 events. To enhance the banks' stability, the regulator had their capital increased using their shareholders' funds and facilitated mergers and acquisitions.
- ↑ Eased lending procedures had a positive impact on businessmen's assessments of the development of the Armenian financial market.

2. ANALYSIS OF LABOR MARKET BREAKDOWNS

To identify current problems in the field of labor market reform, the approach described in the first section was applied to disaggregated indicators of this pillar. The methodology used (Funke et al., 2017) makes it possible to apply an econometric assessment of structural gaps not only to the aggregated indexes of GCI Pillars but to their components as well. This analysis excluded duplicate indicators, and the remaining ones were assembled into two groups: 'Perception of State Policy by Business' and 'Business's Perception of its own Situation'.

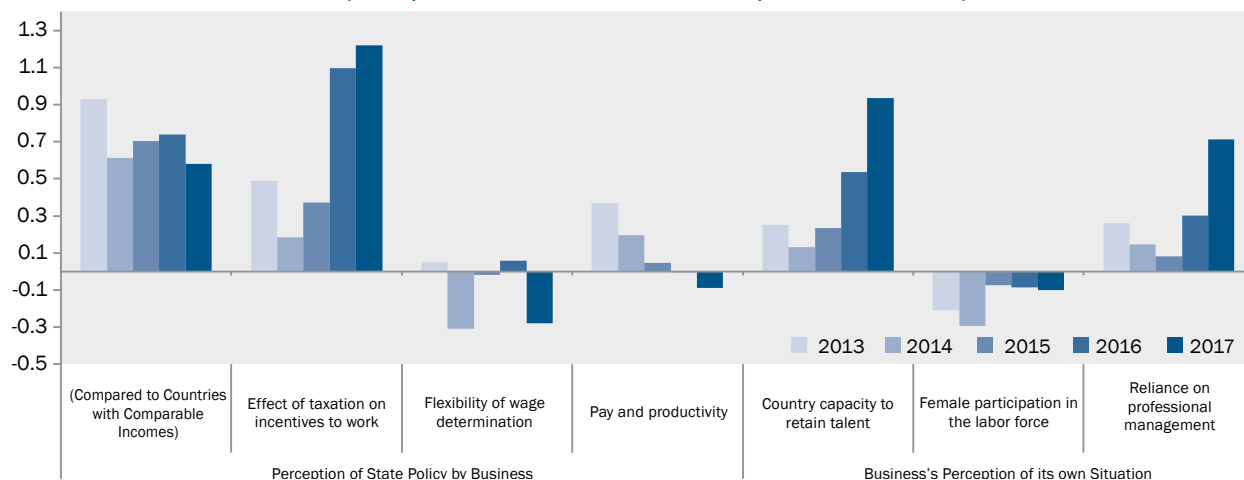
Table 2. Detailed Indicators of the Labor Market

Perception of State Policy by Business	Business's Perception of its own Situation
Hiring and firing practices This indicator answers the question: 'How flexibly does regulation allow you to hire and dismiss personnel?'	Country capacity to retain talent This indicator answers the question: 'Can your country create self-realization opportunities for the most productive workers?'
Effect of taxation on incentives to work This indicator answers the question: 'How much do taxes and benefits reduce the population's economic involvement?' [1 = strongly, 7 = no impact].	Female participation in the labor force This indicator answers the question: 'What is the female to male workforce ratio?' [percentage].
Flexibility of wage determination This indicator answers the question: 'How are wages set?' [1 = centrally, 7 = individually].	Reliance on professional management This indicator answers the question: 'Who occupies managerial posts in companies?' [1 = relatives or friends, regardless of their abilities; 7 = professional managers in most cases].
Pay and productivity This indicator answers the question: 'To what extent do wages reflect the employees' productivity?'	

Source: (Schwab et al., 2017).

The assessments indicate that the labor market reform is relatively ahead of other countries with similar per capita incomes in nearly all areas. The only area of reform that lags behind is wage determination flexibility.

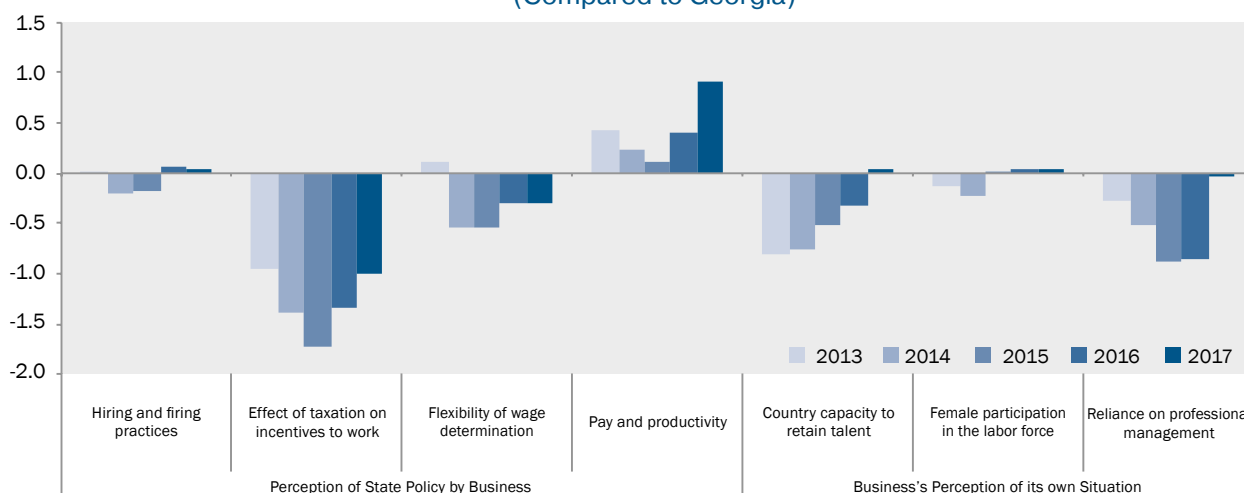
Diagram 3. Structural Reform Gaps in the Armenian Labor Market (Compared to Countries with Comparable Incomes)



Source: authors' calculations.

In comparison with the level of structural reform implemented in Georgia (as the most advanced reformist country in the region), Armenian businessmen assess the reforms to be slow in two of the seven areas ('Impact of Taxes and Benefits on the Population's Economic Involvement' and 'Wage Flexibility'). Also, business assesses the levels of reform in four areas to be equivalent to Georgia's and ahead in one area ('Correspondence between Wages and Productivity').

Diagram 4. Structural Reform Gaps in the Armenian Labor Market (Compared to Georgia)



Source: authors' calculations.

The analysis of the labor market breakdowns pointed to a number of questions that require further study:

- What factors were behind the fall of the 'Flexibility of the Hiring and Firing Process' indicator in 2014?¹⁶
- In the 'Correspondence between Wages and Productivity' area, what factors spurred the excessive growth of wages – both as understood by business (2013–2017) and according to statistical analysis (in 2016)?
- What, besides productivity growth, might have raised the businessmen's assessments of the opportunities for reducing labor emigration? On the contrary, the laws passed in that period and known to the Manager of Fund's resources would either permit or facilitate continued labor migration within the EAEU.
- What events caused women's involvement to grow as noted by the WB in 2015? What statistics did the WB rely upon in formulating this statement?

Now we go on to supplement the analysis of those labor market breakdowns with a review of the authorities' policies, to assess their effect on the values obtained for the structural gaps in the labor market.

Hiring and firing practices

The ease of hiring and dismissing employees directly affects the ability of business to adapt quickly to changed market conditions. The liberalization of labor relations has reduced uncertainty for entrepreneurs, which is beneficial for the investment climate and job creation.

In comparison with *comparable income countries* (see Diagram 3) the indicator for this aspect of the labor market is in positive territory. This means a more flexible approach to hiring and firing in Armenia than in countries with comparable incomes. The 2013–2017 data showed deterioration on average, mainly due to a drop in 2014.

In comparison with *Georgia* (see Diagram 4) the indicator is equivalent to the Georgian level of hiring and firing flexibility. The 2013–2017 data showed no substantial changes.

The question of what factors caused the indicator to drop in 2014 remains open. That said, according to information available to the Manager of Fund's resources, a number of labor laws were passed in 2015¹⁷ that reduced businesses' personnel hiring costs. The reforms in the countries taken for comparison have probably been even more effective than the Armenian legislative changes. However, the issue should be studied in more detail so that accurate conclusions can be made.

¹⁶ According to information available to the Manager of Fund's resources, in this area of labor legislation only some laws were adopted in 2015 that reduced businesses' personnel hiring costs: RA Law No. ZR-120 of 24 November 2015 (which changes the start-of-employment notification procedure), RA Law No. ZR-96 of 14 July 2015 (which changes the terms of the calculation of, and payment for, overtime), and RA Law No. ZR-77 of 7 July 2015 (which institutes an arbitrator for the pre-judicial resolution of employment disputes).

¹⁷ RA Law No. ZR-120 of 24 November 2015 (which changes the start-of-employment notification procedure), RA Law No. ZR-96 of 14 July 2015 (which changes the terms of the calculation of, and payment for overtime), and RA Law No. ZR-77 of 7 July 2015 (which institutes an arbitrator for the pre-judicial resolution of employment disputes)

Effect of taxation on incentives to work

The State's social policy largely shapes the labor market and has an impact on the population's economic activity. A reduced ratio of unemployment benefit to the average wage will generally reduce the number of officially registered unemployed and increase supply in the labor market. The latter consequence may result in lower remuneration costs for business.

In comparison with *comparable income countries* (see Diagram 3) the indicator for this aspect of the labor market is in positive territory. This means a greater effect on economic involvement in the RA than in countries with comparable incomes. The 2013–2017 data showed considerable improvement, mainly on account of strong growth in 2016.

In comparison with *Georgia* (see Diagram 4) the indicator is in negative territory, which means lagging behind the Georgian scale of the effect of taxes and benefits on economic participation. The 2013–2017 data showed no substantial changes.

The indicator's movements were driven by the following competing factors:

- ↓ Minimum wage growth by 43% in 2014: from 35 to 50 thousand drams.
- ↑ According to experts¹⁸, social support made more targeted as part of the social security reform in 2016–2017 improved the situation of the needy while reducing social security costs. The reform also increased labor supply.
- ↑ Adoption of the RA Law No. ZR-36 "On an Amendment and Addition to the Law of the Republic of Armenia 'On Income Tax'" of 27 May 2015, that established a 13% income tax rate for RA citizens registered in the RA but employed abroad. For comparison: the RA income tax rate is 24.4–31% depending on the level of income.

Flexibility of Wage Determination

The State's remuneration policy is reflected both in its legislation (e.g. the minimum wage established for the whole economy) and in individual segments of the labor market, including the education and health systems, where most workers are employed by State-funded entities. Conversely, the State's influence on the wage level may be limited where there is a sizable informal sector.

In comparison with *comparable income countries* (see Diagram 3) the indicator for this aspect of the labor market in 2013–2016 fluctuates around zero, but falls into negative territory in 2017. This means that Armenia falls behind the countries with similar incomes in terms of wage flexibility. The indicator showed decreases in 2014 and 2017, followed by recovery.

¹⁸ According to Sputnik Armenia, March 2017: <https://ru.armeniasputnik.am/exclusive/20170330/6854700/armeniya-ministerstvo-truda-i-socialnyh-voprosov-sokrashchaet-korрупcionnye-riski.html>

In comparison with *Georgia* (see Diagram 4) the indicator is constantly in negative territory, which means lagging behind wage determination flexibility in Georgia. The 2013–2017 data showed deterioration, mainly due to the fall in 2014.

The indicator's movements were driven by the following competing factors:

- ↓ The Law of the Republic of Armenia No. ZR-157 'On Labor Compensation for Persons Occupying State Positions' adopted on 28 December 2013 was intended to raise public servants' salaries. It resulted in 17% salary growth in the public sector during the year vs. 2% growth in the private sector.
- ↓ 43% minimum wage growth in 2014: from 35 to 50 thousand drams.
- ↑ The Law of the Republic of Armenia No. ZR-152 'On Employment' adopted on 28 December 2013 replaced unemployment benefit with active labor policy mechanisms. It was later amended in 2015 to diffuse its impact.
- ↓ The RA Law No. ZR-22 'On Public Organizations' adopted on 16 January 2017 provoked protests in society, for the State allowed human rights organizations to engage in commercial activity but under stronger Government control¹⁹. Business may have perceived increased State influence on trade unions as stronger Government influence on the wage determination process in the country.

Pay and productivity

The relationship between labor productivity and remuneration is a universal method for assessing an economy's competitiveness. The State's policy resulting in wage increases in State-funded entities, benefit changes or revision of migration arrangements may have a considerable impact on this indicator of competitiveness.

In comparison with *comparable income countries* (see Diagram 3) the indicator decreased in the last five years to find itself in negative territory in 2017. This means that Armenia's competitiveness is currently a little below the level of comparable income countries.

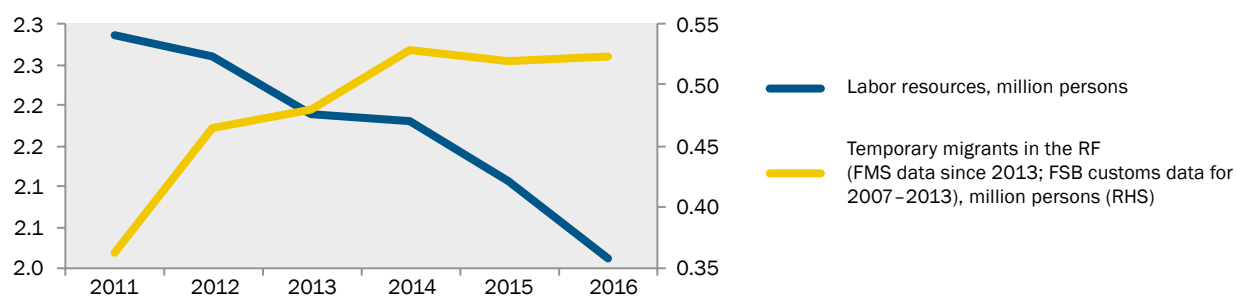
In comparison with *Georgia* (see Diagram 4) the indicator is constantly in positive territory, meaning that the business community considers the Armenian economy to be more competitive than the Georgian one. The 2013–2017 data showed an improvement, mainly on account of growth in 2016–2017.

However, any analysis of this index should take into account that it is based on business community surveys and may deviate from statistics. Thus, the *statistical* indicator of the observed 'pay and productivity' gap for Armenia showed growth for the first time in six years in 2016, which cancelled out the whole growth of Armenia's economic competitiveness since 2012. The growth was caused by a 10% increase in real wages in 2016 against 7% productivity growth.

¹⁹ Opinion of the RA Minister of Justice, according to News of Armenia, October 2016: <https://news.am/rus/news/350315.html>

The question of which factors were behind the excessive growth of wages, both statistically and in the businessmen's opinion, remains open.

Diagram 5. Armenia's Labor Resources and Temporary Labor Migrants in the Russian Federation



Source: Armstat, Federal Migration Service of Russia, Customs Control of the Federal Security Service of Russia.

Country capacity to retain talent

The national economy's ability to provide the best-trained personnel with self-realization opportunities and thus prevent their emigration is a key pre-condition for high involvement of the population in labor processes within the country.

In comparison with *comparable income countries* (see Diagram 3) this aspect's indicator demonstrated stable growth in the last three years (2015–2017), staying in positive territory all the time. This means the Armenian economy fared better than the countries with similar incomes in terms of its ability to provide its citizens with domestic self-realization opportunities. The improvement of this index since 2014 was reflected in the statistically observed stabilization of the number of labor migrants in the Russian Federation during that period (see the diagram above).

In comparison with *Georgia* (see Diagram 4) the indicator is consistent with the Georgian labor migration propensity level. The 2013–2017 data showed a considerable improvement of the indicator, mainly due to its growth in 2015–2017.

Yet the question of what might have led the business community to improve their assessment of the possibility of reducing labor migration, besides natural productivity growth in the Armenian economy, remains open. On the contrary, the laws passed in that period were conducive to the growth of labor migration within the EAEU:

- the EAEU Treaty was ratified²⁰, which actually preserved the pre-existing level of integration of Armenia's and Russia's labor markets; and
- the above-mentioned RA Law No. ZR-36 "On an Amendment and Addition to the Law of the Republic of Armenia 'On Income Tax'" of 27 May 2015 was passed, that nearly halved the income tax rate for labor migrants, from 24.4–31% to 13%.

²⁰ The Treaty entered into force on 1 January 2015.

Female participation in the labor force

The growth of women's participation in the workforce and the attainment of gender parity are considered essential to sustainable growth and social stability²¹.

In comparison with *comparable income countries* (see Diagram 3) this aspect's indicator was in negative territory all the time, despite its sharp growth in 2015. This means a lower proportion of women in the structure of workforce than in countries with comparable levels of income.

In comparison with *Georgia* (see Diagram 4) the indicator is consistent with the Georgian level of women's participation in economic activities. The 2013–2017 data showed no considerable change in the indicator.

Armenia is notable for the low participation of women in economic activities, traditionally attributed to a protracted child rearing period that has to be extended because kindergartens and crèches are scarce or unaffordable at market prices. It should be noted that the low economic involvement of women in Armenia is highly stratified²²: among people with tertiary education, the share of women in the workforce is higher than men's. Hence, women's economic involvement can only increase if their access to education services is improved and measures are taken to broaden their access to child care services.

As regards Government action, the only significant legislative decision taken to guarantee equal rights to work in Armenia is the law of the same title, No. 57-N, adopted on 20 May 2013²³. It recodified²⁴ women's right to work, but had no effect on the index. The laws that support motherhood probably address demographic issues and have no decisive impact on the behavior of women as economic agents. Section 3 will show that IFOs' recommendations focus on policy measures aiming to facilitate child rearing, which is partially reflected in the authorities' new program of action.

Still, what events caused the growth of women's economic involvement as noted by the WB remains an outstanding question.

Reliance on professional management

The approach to the selection of managerial staff based on their abilities rather than informal ties is an important factor of productivity growth in an economy. Meritocratic selection of executives in the corporate sector is a top priority for institutional reform during catching-up development.

²¹ 'Women's full participation in labor relations could increase the world economy's size by as much as 20% by 2025', assessment by McKinsey consulting agency, according to Kommersant newspaper, September 2015: <https://www.kommersant.ru/doc/2819437>.

²² According to Armstat: <http://www.armstat.am/file/doc/99504348.pdf>.

²³ According to Armenian Weekly, September 2013: <https://armenianweekly.com/2013/09/20/the-gender-equality-law-hysteria-in-armenia/>.

²⁴ After the RA Government adopted its Decision No. 645 in 2004 and protocol decisions in 2010 and 2011, and the RA Ministry of Labor and Social Protection issued its methodological guidebook in 2012.

In comparison with *comparable income countries* (see Diagram 3) this aspect's indicator is in positive territory. That means that Armenian corporate governance is generally more meritocratic than in countries with comparable incomes. The index data showed considerable improvement in five years, mainly due to strong growth in 2016–2017.

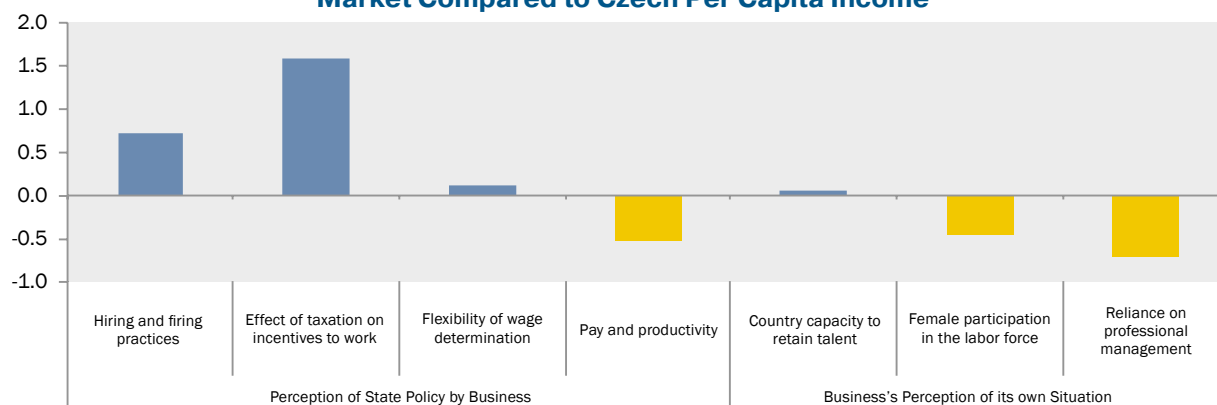
In comparison with *Georgia* (see Diagram 4) the index is zero, which means a meritocratic management level close to the Georgian one. The index data showed considerable improvement in five years, mainly due to strong growth in 2017, which shows the indicators of Georgia and other countries with similar incomes to be codirectional.

In our assessment, the growing complexity of the financial products used had the greatest impact on this indicator's trends. After foreign demand shrank in 2014–2015 and the financial situation at the real sector enterprises deteriorated, the latter needed to attract more bank funding. This resulted in more complicated financing schemes and, consequently, higher qualifications required of the managing personnel and greater meritocracy in corporate management.

3. REVIEW OF THE POTENTIAL AREAS OF STRUCTURAL REFORM IN RESPECT OF THE LABOR MARKET

To identify the potential areas of reform that will facilitate institutional development convergence with more developed countries, we should apply higher per capita income criteria. In other words, the 'current issues' point to the difference between the country and other economies with similar levels of income, while 'potential areas of reform' show how different the country is from more developed economies. To this end, we applied an approach with a higher benchmark for the observable measures of the country's current institutional development to the preceding section's labor market subindexes. The Czech Republic was chosen for comparison, being a developed but land-locked EU country with a Soviet-era institutional background.

Diagram 6. Structural Reform Gaps in the Armenian Labor Market Compared to Czech Per Capita Income



Source: authors' calculations.

As seen from Diagram 6, a review of the structural gaps in the labor market compared to Czech per capita income shows Armenia to be behind in three areas out of seven. The areas most important for study are Meritocratic Management, Correspondence between Wages and Productivity, and Women's Economic Involvement.

Main Conclusions and Suggested Reforms

The use of the leading IFOs' innovative approaches to the analysis of structural reforms does much to enhance EFSD's ability to assess the structural challenges faced by the economies under scrutiny. Although the methodology is a general one that cannot unambiguously identify causal links at this stage, its application is the first attempt to broadly diagnose structural imbalances in EFSD member countries using quantitative criteria. Moreover, the proposed methodology, enriched with EFSD expertise, helps overcome the weaknesses identified, suggest explanations for the observed status of the structural problems and define the range of outstanding issues that require further study.

Armenia exemplifies a country that makes better progress than generally expected of countries with similar incomes but which is far behind the regional leaders in terms of reform. Thus, structural gap assessments show that the country is still behind Georgia as regards the implementation of structural reforms. More specifically, RA businessmen's assessments point to slow progress on three out of five areas of reform (Institutions, Infrastructure, and Financial Market). The labor market reform status was found by business to be equivalent to Georgia's level, and goods market reform to be above it. Yet in comparison with other countries that have similar incomes²⁵, some successes of Armenia in the field of reform are visible.

As regards the detailed assessment of the labor market gaps, the situation is less optimistic. In this field, Armenia is behind the countries with comparable incomes in terms of Wage Flexibility and, compared to Georgia, is also behind in terms of Impact of Taxes and Benefits on the Population's Economic Involvement.

The review of the authorities' actions also showed legislative efforts to improve the institutional situation in the country and implement the reforms in the period under scrutiny. Yet there were outstanding questions formulated in respect of the Flexibility of the Hiring and Firing Process, Labor Migration Propensity, Women's Economic Involvement, and Correspondence between Wages and Productivity, whose examination is of considerable practical interest for the preparation of further recommendations to the authorities.

The structural gaps in the labor market compared to advanced countries' level of income help identify the promising areas of reform that lead to convergence with those countries. The assessment findings point to the potential of measures in the areas of corporate governance, labor productivity and women's economic involvement growth. As the Armenian authorities have declared those areas of reform to be relevant for their country, their implementation may rely on IFOs' suggestions (see Table 3).

²⁵ The countries with comparable per capita income include Georgia, Indonesia, Mongolia and others.

Table 3. Potential Measures to be implemented in Armenia

RA Government (2018 Program)	World Bank (Systematic Country Diagnostic 2017)
Meritocratic Management	
<p>Combatting monopolism in domestic markets through the enhancement of competition and equality of all before the law.</p>	<p>Improvement of corporate governance:</p> <ul style="list-style-type: none"> • more transparent corporate reporting (including disclosure of financial and non-financial information); • empowerment of the Boards of Directors; • protection of investors' rights. <p>Working to improve anti-monopoly legislation, including managerial decision-making:</p> <ul style="list-style-type: none"> • introduction of competitive principles in the assessment of draft laws' regulatory impact; • expanding the toolkit of the SCPEC (State Commission for the Protection of Economic Competition)²⁶. The regulator needs better tools to combat anti-competitive conduct, instead of price controls; • adjustments of fines; • introduction of 'affiliate' detection machinery; • more transparent public procurement procedures and introduction of electronic mechanisms. <p>Working on the 'gaps' in legislation to improve the business climate and the institutional environment (the WB Guillotine project).</p>
Correspondence between Wages and Productivity	
<p>Switching to vocational education as the basis for the development of a skilled workforce in the country.</p>	<p>Introduction of a continuous vocational education system as an instrument for increasing labor productivity and reducing social stratification²⁷.</p> <p>Introduction of personnel retraining programs to address the mismatch between skills and requirements in the labor market.</p>
Women's Economic Involvement	
<p>Improving access to elementary education nation-wide. Start of practical implementation of equal rights for all population groups. Exclusion of unfounded elitist approaches to individual groups of citizens from application of the law.</p>	<p>Facilitation of women's access to vocational and university-level education.</p> <p>Taking measures to ease their child care responsibilities:</p> <ul style="list-style-type: none"> • xpansion of the system of kindergartens, particularly in rural areas, • introduction of benefits for students from rural areas. <p>IMF, 2017. Selected issues: the creation of specialized seasonal jobs can serve as a basis for women's involvement. This approach enables them to combine participation in the workforce with their family responsibilities, for full-time employment may currently hinder women's economic involvement.</p>

Source: materials of the RA Government, World Bank, and International Monetary Fund.

²⁶ According to the study (World Bank, 2013).

²⁷ (Coady et al., 2017) show that social stratification decreases with the increase of the population's level of education. Hence, the growth of expenses on education reduces social stratification.

LIST OF ABBREVIATIONS IN THE SPECIAL REPORT

ECA – Central and Eastern Europe, Central Asia, and the Caucasus

EFSD – Eurasian Fund for Stabilization and Development

IFOs – International financial organizations

IMF – International Monetary Fund

OECD – Organization for Economic Cooperation and Development

RA – Republic of Armenia

RA CB – Central Bank of the Republic of Armenia

WB – World Bank

WB GCI – Global Competitiveness Index of the World Bank

WB WEF – WB World Economic Forum

WB WGQI – WB World Governance Quality Index

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