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Private Sector Financing
And The Role Of Risk-bearing Instruments

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Private Sector Financing In The Eastern Partnership Countries And The Role Of Risk-bearing Instruments

Country report: Armenia

November 2013

Business & Finance Consulting

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EPTATF VISIBILITY

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List of acronyms

ADB	Asian Development Bank
BFC	Business & Finance Consulting
BSTDB	Black Sea Trade and Development Bank
CAR	Capital adequacy ratio
CBA	Central Bank of Armenia
CEO	Chief executive officer
CGF	Caucasus Growth Fund
CJSC	Closed joint stock company
CPI	Consumer price index
DEG	Deutsche Investitions- und Entwicklungsgesellschaft
DFI	Development Finance Institution
EBRD	European Bank for Reconstruction and Development
EFSE	European Fund for Southeast Europe
EIB	European Investment Bank
EIU	Economist Intelligence Unit
EU	European Union
FDI	Foreign Direct Investment
GAF	German Armenian Fund
GDP	Gross Domestic Product
IFC	International Finance Corporation
IFI	International Financial Institution
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
IRR	Internal rate of return
IT	Information technology
KfW	Kreditanstalt fur Wiederaufbau
LIBOR	London interbank offered rate
LLC	Limited Liability Company
MFI	Microfinance Institution
MSME	Micro, Small and Medium Enterprise
NBCI	Non-bank Credit Institution
NGO	Non-governmental organization
NPL	Non-performing loan
OJSC	Open joint stock company
PPP	Purchasing power parity
ROA	Return on assets
ROAA	Return on average assets
ROAE	Return on average equity
ROE	Return on equity
SEAF	Small Enterprise Assistance Funds
SME	Small and Medium Enterprise
SME DNC	SME Development National Center
UK	United Kingdom
US	United States
USAID	United States Agency for International Development
VAT	Value added tax
YE	Year end

End of period exchange rates used in this report

	June 30, 2013	2012	2011	2010	2009	2008
EUR/USD	1.30	1.32	1.29	1.33	1.43	1.41
EUR/AMD	533.1	533.3	498.7	481.2	542.2	435.0

Sources: Oanda.com

ABOUT THIS REPORT

This report is one of a series of reports produced by Business & Finance Consulting GmbH (BFC) for European Investment Bank (EIB) as part of the project "Private Sector Financing In The Eastern Partnership Countries And The Role Of Risk-bearing Instruments." The series of reports includes individual country reports on Armenia, Azerbaijan, Georgia, Moldova, and Ukraine, as well as a synthesis report which considers the results from all five countries. The purpose of the project is to assess the financing needs of SMEs in the Eastern Partnership countries and identify market failures that prevent the development of the SME sector.

The project was carried out from June 3, 2013 to November 1, 2013 by a team of four experts from BFC. Onsite visits were conducted for each country in order to meet with representatives from financial institutions, development institutions, the government, and other relevant actors who can comment on the SME sector and its access to finance. The visit to Armenia took place from July 29 to August 2, 2013, during which time meetings were held with representatives from 20 organizations, including 14 local financial institutions, 4 international development institutions and 2 government bodies.

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1. EXECUTIVE SUMMARY

Armenia is a small landlocked country with a limited domestic population and an enormous diaspora, creating a variety of impediments and opportunities for SMEs. The economy is highly dependent on remittances, exceedingly dollarized and still largely informal in some sectors or dominated by oligarchical business groups in others. Despite all of these challenges, the country's economy has performed well, especially in the post-financial crisis period as it returns to pre-crisis growth. In 2012, GDP grew by 7.2%, with another 5.2% expected in 2013. Inflation dropped significantly in 2012, from 7.7% in 2011 down to 2.6%. Similarly, the budget deficit fell to 2.2% of GDP in 2012 and is expected to remain low.

The country's 22 banks account for nearly 92% of financial sector assets, with the rest of the financial sector made up of microfinance institutions, leasing companies, general non-bank credit institutions and other smaller players. The banking sector emerged strong from the global financial crisis, partly due to a well-functioning and supportive central bank, and remains well capitalized and highly liquid. Asset quality and profitability are adequate. The microfinance sector is competitive, with 12 players, while the leasing sector is dominated by one major player controlling 92% of the sector. The availability of risk capital is minimal, comprised of one international fund that has made one investment in Armenia to date, one newly registered fund investing in start-up IT companies and a government-sponsored investment vehicle.

SMEs account for the vast majority of total enterprises in Armenia, although they contribute a disproportionately low amount to GDP, employment, foreign trade and foreign investment. A strong government support body is in place, carrying out policy under the Ministry of Economy's *Concept for SME Development Policy and Strategy in Armenia*, developed in 2000. Overall the regulatory environment is favorable to businesses, with a one-stop-shop system for business registration. Other regulations, however, are especially burdensome, such as the slow and complex tax system with little to no preferential treatment for SMEs. SMEs figure most prominently in the trade sector, accounting for 98.9% of total businesses operating in the sector, followed by industry (95.0%) and agriculture and food processing (93.4%). Just under half of SMEs are located in or around Yerevan.

Banks are by far the largest suppliers of finance to SMEs, in accordance with their dominance in the financial sector as a whole. The government also provides financing to SMEs, although outreach is limited. The leasing company that dominates the sector works mainly with SMEs, although outreach is small as leasing companies in general are highly constrained by access to funding. Trade finance products such as letters of credit and guarantees are available but comprise a small proportion of SME funding (3.3% of gross SME loans of the nine banks interviewed). Meanwhile, funding for commercial banks is plentiful with the exception of local currency funding, especially for longer tenors.

The largest identifiable gap in financing is for long term local currency funds to SMEs, especially at affordable prices. Latent demand for other financial products, especially leases and risk capital, is also pervasive. Providers of both such products remain limited, and insufficient financial literacy in Armenia means that SMEs are not fully aware of the benefits of either type of product.

2. MACROECONOMIC ENVIRONMENT

Conclusion:

While Armenia's economy was hit hard by the global financial crisis, it has made a strong comeback with continued growth, lower inflation and a declining budget deficit expected going forward. However, some characteristics particular to the Armenian economy are unfavorable to the SME sector, such as the high level of dollarization, a pervasive informal sector and the dominance of oligarchs in certain sectors of the economy.

Key findings:

- *2012 growth was driven by the mining, agriculture, agro-processing and services sectors*
- *With more than 70% of Armenians living abroad, the economy relies heavily on remittances, especially from Russia*
- *FDI has declined recently, partly as a result of the Eurozone crisis*
- *Certain sectors of the economy continue to be dominated by oligarchs, leaving little room for SMEs to emerge*

Key macroeconomic indicators for the country are presented in Annex 1.

2.1 Economic development and growth

Armenia is a small, landlocked country with a total population of just over 3.0 million as of Q1 2013.[1] After being severely hit by the global financial crisis, which caused GDP growth to decline to a low of -14.1% in 2009, the country has made a strong comeback, reaching 7.2% growth in 2012, up from 4.7% in 2011.[2] Last year's growth was led by the mining, agriculture, agro-processing and services sectors. While overall GDP reached EUR 7.5 billion in 2012, GDP per capita was relatively low at EUR 2,479, which is comparable to regional neighbor Georgia (EUR 2,663), but less than half of oil-rich Azerbaijan (EUR 5,523).[3] Growth is expected to be 5.1% in 2013.[4]

Unemployment is not particularly high, at 6.2% as of 2011, but better job opportunities in other countries results in 60,000 citizens leaving Armenia annually.[5] The country's Gini coefficient has been gradually declining over the past ten years to reach 30.9% as of 2008, the latest data available, indicating a more equal economy than its neighbor Georgia (Gini coefficient of 46% in 2011). The global financial crisis had a major impact on the economic situation of the population, causing the national poverty rate to increase from an already high 27.6% in 2008 up to 34.1% in 2009 and an even higher 35.0% by 2011.[6] The rate of extreme poverty, defined by the World Bank at USD 1.25 per day, was comparatively low at 2.5% in 2010, but still much higher than in Azerbaijan, Ukraine, and Moldova.

Armenia's sovereign ratings from Moody's and Fitch are Ba2 (stable) and BB- (stable), respectively. In August 2013 Moody's changed the country's outlook from negative to stable, driven by the

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[1] ArmStat: http://docs.armstat.am/nsdp/

[2] IMF (February 2013). *Fifth Review for EFF and ECF, IMF Country Report No. 13/34*

[3] As of 2011

[4] IMF (July 2013). *Sixth Review under the EFF and the ECF*, IMF Country report # 13/238

[5] IMF (February 2013). *Fifth Review for EFF and ECF, IMF Country Report No. 13/34*

[6] IMF (February 2013). *Fifth Review for EFF and ECF, IMF Country Report No. 13/34;* The national poverty line is estimated at AMD 25,188 (EUR 47) per month. Source: http://www.imf.org/external/country/ARM/rr/2012/101812.pdf

country's commitment to multi-year fiscal consolidation. Fitch downgraded Armenia's BB rating to BB- in August 2009, affirmed in August 2012.

2.2 The structure of the economy

In Soviet times Armenia's economy was based on a modern industrial sector, supplying goods such as machinery, textiles and other manufactured items to neighboring countries. It has since switched to an economy based on small-scale agriculture, with agriculture contributing 20.2% of total GDP in 2011, followed by industry (16.7%), retail trade (13.4%) and construction (12.8%).[7] Armenia went through a fairly thorough privatization process between 1994 and 2002, with very few state owned enterprises left. However, the economy still falls under a strong oligarchical structure, with some sectors, especially food/grocery stores, sugar, flour, vegetable oil, fuel and mining dominated by oligarchs.[8] There appears to be very little trickle down to the SME sector, and the presence of such large players often reduces opportunities for SMEs in many areas.

One noteworthy characteristic of Armenia's economy is its enormous diaspora: about 70% of Armenians live abroad, leaving behind a country that relies heavily on remittances. Such inflows are of extreme importance to the development of the economy, having averaged 16% of GDP over the last five years. This is twice as much as foreign direct investment (FDI) and four times more than official government inflows, such that remittances finance roughly two fifths of Armenia's imports. The large Armenian workforce in Russia contributes between 80% and 90% of all remittances and underscores the importance of Russia to the Armenian economy.[9] In general Armenia's economy is very closely tied to Russia's, as it is the country's main export and investment partner. Partly as a result of the country's high level of remittances, the economy is highly dollarized.

The informal economy represents a significant part of Armenia's economy and has a particular effect on SMEs, especially in the retail sector where up to 50% of total sales are unregistered.[10] This means that small retail outlets reporting their full income are not as competitive, creating a self-perpetuating cycle of informality inherent to the system. Other sectors, on the other hand, are known for being more "clean," such as the financial and IT sectors. According to the latest estimates of the Asian Development Bank (ADB), the informal economy represented 11.3% of the total GDP in 2009.[11] Also according to the ADB, the contribution of the informal sector to the gross value added is the highest in agriculture (22.4%), construction (15.4%) and wholesale and retail trade (14.8%), the sectors with the largest SME share.[12]

2.3 Inflation and asset prices

Armenia faced moderately high inflation in 2011 of 7.7% (based on the consumer price index), primarily the result of high global food and commodity prices. Continuing fiscal consolidation and contained public spending have brought the inflation rate down significantly in 2012 to 2.6%[13] with expectations that inflation will remain within the target band (2.5% to 5.5%) throughout 2013.[14]

Armenia suffered a 22% depreciation of the AMD in March 2009. Until that point, the AMD had been tightly controlled by the Central Bank of Armenia (CBA), keeping it artificially high while the real

[7] Economist Intelligence Unit (2012), *Country Report: Armenia*
[8] Source: Various on-site interviews with financial intermediaries and international donors
[9] IMF (February 2013). *Fifth Review for EFF and ECF, IMF Country Report No. 13/34*.
[10] Anecdotal information from meeting with SEAF
[11] OECD Eastern Partner Countries SME Policy Index 2012
[12] OECD Eastern Partner Countries SME Policy Index 2012
[13] CBA Statistical Bulletin 2012
[14] Based on both EIU and IMF forecasts. The central BMI inflation forecast is towards the top end of the target range (5.5%).

effective exchange rate continued to appreciate due to a high level of FX inflows, mainly from remittances, and high export prices.[15] The sharp depreciation in the wake of the financial crisis and a slowdown of remittances had a profound and continuing effect on the availability of local currency-denominated financing for SMEs. Nearly overnight the general population converted much of their deposits into hard currencies, severely limiting the availability of local currency finance for SMEs. This remains the situation currently, forcing SMEs, most of which earn local currency, to take on the exchange rate risk for USD-denominated loans, which are more readily available on the market. The AMD has depreciated 11% over the past two years.

2.4 Balance of payments

Armenia's current account deficit widened slightly in 2012 to an estimated -10.7%[16] of GDP, up from -11.4% in 2011[17] but down from a high -16.5% in 2009, immediately post-crisis. It is forecasted to narrow slightly over the next couple of years to under 8.0% of GDP in FY14.[18] Accordingly, the trade deficit is high at -28.7% of GDP in 2012, down from -25.0% in 2009.[19] Armenia's openness to trade is modest, hampered by its landlocked position and the closed borders with its neighbors Azerbaijan and Turkey.[20] The lack of export opportunities is one of the greatest constraints to growth for SMEs. Regardless, the trade balance is expected to improve as Georgia, one of Armenia's only two open borders (along with Iran), reopens its borders with Russia, through which Armenian goods are exported. The country's principal exports are mineral products, base metals and precious and semi-precious stones and metal and food items.

Armenia has seen significant slowdown in FDI recently, partly as a result of the Eurozone crisis. Total FDI fell 22.5% in 2010 and another 20.5% in 2011, finally increasing again in 2012 by 5.9%. FDI in Armenia was principally dominated by large energy and communications projects, which are nearing completion state. This slowdown is considered temporary by the IMF given planned projects in mining, manufacturing, and energy.[21] It is unclear to what extent SMEs will benefit from these projects, although the effect will likely be minimal given SMEs' historically low participation in these sectors. The slump in FDI has resulted in a decline in international reserves of the CBA, but these have recently stabilized and were estimated to have ended 2012 at roughly three and a half months of imports (down from four and a half months at YE11).[22]

2.5 The fiscal and political situation

The government has followed a tight fiscal policy, largely from spending cuts, which has helped to reduce the budget deficit to 2.2% of GDP in 2012, lower than expected by the IMF due to delays in a large capital projects and tax collection improvements. It is expected to widen to 2.6% in 2013 as capital spending picks back up. External government debt is relatively low, at 31.9% of GDP in 2012.

Armenia's political system is characterized by a lack of political competition. President Serzh Sargsyan was comfortably re-elected to a second five year term in February 2013, and the parliamentary elections in May 2012 reappointed Tigran Sargsyan as Prime Minister. The finance and economy ministers were appointed to other positions, but policy continuity is expected.[23] The lack of

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[15] Source: "Armenia: An Assessment of the Real Exchange Rate and Competitiveness," Anke Weber, Yang, Chufang, p. 6.
[16] Economist Intelligence Unit (2012), *Country Report: Armenia*
[17] CBA External Sector Statistics
[18] IMF (February 2013). *Fifth Review for EFF and ECF, IMF Country Report No. 13/34*
[19] IMF (July 2013). *Sixth Review under the EFF and the ECF*, IMF Country report # 13/238
[20] Trading Economics (February 2013). http://www.tradingeconomics.com/
[21] IMF (February 2013). *Fifth Review for EFF and ECF, IMF Country Report No. 13/34*
[22] IMF (February 2013). *Fifth Review for EFF and ECF, IMF Country Report No. 13/34*
[23] IMF (July 2013). *Sixth Review under the EFF and the ECF*, IMF Country report # 13/238

political competition further encourages a well-established oligarchical structure, protecting the strong ties between the political and business elite. As mentioned earlier, the sectors controlled by the oligarchs allow very little room for SMEs to enter or compete, as determined by anecdotal evidence.

3. Financial sector overview

Conclusion:
The Armenian financial sector is dominated by the banking sector, which made up 91.6% of total financial sector assets as of May 31, 2013. The level of financial intermediation is moderate for a developing economy, with financial sector assets representing 68.0% of GDP.

Key findings:
- *The banking sector is comprised of 21 commercial banks and one development bank, with a high level of foreign participation*
- *In general, banks are well capitalized and highly liquid. Profitability and asset quality are adequate.*
- *Other financial sector players include a leasing sector dominated by one player, a competitive but small microfinance sector, other non-bank financial institutions focused on consumer lending and a virtually nil presence of risk capital*

3.1 Financial sector overview

The Armenian financial sector is dominated by the banking sector, which made up 91.6% of total financial sector assets as of May 31, 2013. As of Q1 2013 there were 22 banks in Armenia, 21 of which were commercial banks and one development bank (Panarmenian Bank). The non-bank market remains highly underdeveloped and includes 33 non-bank credit institutions,[24] up from 32 at December 31, 2012, nine insurance companies, three insurance brokers, 126 pawnshops and 226 exchange offices, among other smaller players.[25]

Total financial sector assets were equivalent to 66.3% of GDP at year-end 2012,[26] which is higher than Azerbaijan (28.5%)[27] and comparable to Georgia (63%), but remains low relative to more advanced economies. Deposits were 31.2% of GDP at YE12, up considerably from 12.3% at YE08.

Number of financial institutions by type

Type of institution	2012	2011	2010	2009	2008
Banks	22	22	21	22	22
Insurance companies	9	9	11	12	12
Insurance brokers	3	4	5	5	5
Credit organizations	32	32	32	27	24
Investment service providers	n/a	29	29	30	32
Pawnshops	126	137	127	117	70
Exchange offices	226	259	229	250	238
Currency dealers	n/a	1	2	2	1
Payment system organizations	10	10	10	10	11

Source: CBA Statistical Bulletin

[24] 12 of which are microfinance institutions and 3 of which are leasing companies
[25] Source: CBA, as of December 31, 2012
[26] GDP figure is as of December 31, 2012
[27] As of 2011, including assets of banks and MFIs, but excluding assets of lesser players, such as insurance companies

3.2 Banking sector

3.2.1 Structure

The number of commercial banks in Armenia has been mostly stable for at least the past five years, with the exception of ProCredit Bank entering the market in 2008 and Ameriabank's acquisition of Cascade Bank in 2010. As of Q1 2013, the 21 commercial banks had a total of 474 branches, 196 of which were located in Yerevan.[28]

The level of foreign ownership is high. As of July 2013, the portion of foreign capital in the Armenian banking system was 73.2%, up from 58% in 2007.[29] About half of the banking sector, by assets, is made up of subsidiaries of foreign banks from Russia, France, the UK, Cyprus and Kazakhstan. There are no state owned banks in the country.[30] Three banks are structured as open joint stock companies (OJSC) and one is a limited liability company (LLC), with the other 17 being closed joint stock companies (CJSC), which indicates that they have a maximum of five shareholders.

Total banking system assets were EUR 4.8 billion as of Q1 2013, up 7.2% from the end of 2012. Total assets achieved a high compound annual growth rate of 25.6% between 2007 and 2012. In view of lower inflation, monetary policy was eased in September 2011, thus encouraging lending to some extent. Total capital of the banking sector grew by 10.6% in 2012 and another 3.0% in the first quarter of 2013 to EUR 756.2 million as of March 31, 2013. Total banking sector assets represent 59.8% of GDP as of 2012, and gross loans 31.1% of GDP.[31]

	Q1 2013	2012	2011	2010	2009	2008
Number of banks	22	22	22	21	22	22
Number of bank branches	474[32]	479	n/a	n/a	n/a	n/a
Bank assets (EUR millions)	4,781	4,486	4,144	3,243	2,445	2,353
Share of loans in fin. sector (%)	91.6	90.2	n/a	n/a	n/a	n/a

Source: CBA

Armenia's banking sector exhibits moderate concentration among the largest banks, with the top five banks by assets holding 48.6% of total banking sector assets as of Q1 2013 and by loans, 48.8%.[33] Ameriabank is the largest bank by total assets, holding 12.1% of total assets as of Q1 2013. Consolidation in the banking sector seems likely in the medium term, as 21 banks are generally deemed an excessive number for the relatively small size of the Armenian economy. That said, there are no expected upcoming mergers or acquisitions, with all banks holding strong capital positions.

3.2.2 Performance

Overall Armenian banks are well capitalized with strong liquidity positions. While profitability flagged slightly in the post financial crisis period, it is currently recovering, with continued improvements expected. Asset quality is generally sound, although high levels of currency risk at the borrower level could translate into potential future credit risk for banks.

Capital Adequacy: The banking sector is well capitalized, despite recent weakening, with an aggregate CAR of 16.4% as of March 2013, down from 16.8% at YE12 and 18.3% at YE11, but still

[28] KPMG Armenian Banking Sector Overview Q1 2013
[29] http://www.armbanks.am/en/2013/07/25/58692/
[30] http://www.imf.org/external/pubs/ft/scr/2013/cr1310.pdf
[31] GDP figure is as of December 31, 2012
[32] Excluding Panarmenia Bank
[33] KPMG Banking Sector Overview, 2013 1st quarter

well above the regulatory minimum of 12.0%. The tier 1 capital ratio was also a high 14.9% as of March 2013, down slightly from 15.2% three months earlier. The capital adequacy framework in Armenia is based on Basel II with the specification of a higher risk weighting on FX loans introduced in the aftermath of the financial crisis. This higher risk weighting has partially eroded the strong pre-crisis capital buffer most banks had built up.[34] The declining CAR over the past five years is coupled with higher leverage, possibly reflecting an increasing trend of a higher risk appetite by banks, according to the IMF.

Profitability: Profitability indicators are finally starting to return to pre-global financial crisis levels. ROAA and ROAE were 2.5% and 14.7%, respectively, in 2012, up from 1.8% and 9.8%, respectively, a year earlier. As of March 2013, net profit for the entire sector was 5.9% higher than it was over the same period a year earlier. In the first quarter of 2013, 15 of the 21 banks were profitable.[35] According to KPMG, average annual growth in net profit for the period of 2013-2014 is forecasted to be 35%, or 82% higher than 31 December 2012.

Liquidity: The Armenian banking sector was quite liquid as of May 2013, with liquid assets comprising 25.5% of total assets and covering 131.1% of demand liabilities.[36] There is variation from bank to bank, though, with some much more liquid than others. While the CBA imposes strict liquidity requirements, there is no differentiation by currency and banks tend to be much more liquid in local currency, posing a risk if there were a large outflow of foreign currency. The sector's loan to deposit ratio has remained consistently above 100% (2012: 132.7%, 2011: 129.6%), reflecting a high level of funding from foreign banks, international organizations, the government and the CBA.[37] Interbank lending is not a significant source of liquidity.[38] The CBA can provide short-term liquidity support with collateral, and more significant assistance can be provided in exceptional cases.

Credit risk: Asset quality in the banking system remains reasonably good when compared with regional peers. Non-performing loans[39] represented 3.5% of the total loan portfolio as of February 2013, according to CBA representatives, an improvement from 4.3% at June 2012 (YE11: 3.4% and YE10: 3.1%). In general, banks' asset quality did not suffer lasting damage following the financial crisis due to low exposure to the construction and real estate sectors, two of the sectors the hardest hit. According to the IMF, there is evidence that some commercial banks have strengthened their risk management practices regarding credit risks stemming from exchange rate volatility.[40] NPLs for foreign currency denominated loans have been mostly on par with local currency loans for at least the past five years.

Market and other risk: The main source of market risk arises from the high level of dollarization in the banking sector. Bank balance sheets are heavily dollarized, with 60% to 70% of liabilities and loans held in foreign currency.[41] Foreign currency lending is limited to businesses and a small mortgage sector, as banks are required by regulation to make all consumer loans in local currency. Therefore, extending foreign currency loans to businesses earning local currency only serves to pass

[34] http://www.imf.org/external/pubs/ft/scr/2013/cr1310.pdf
[35] KPMG Banking Sector Overview, 2013 1st quarter
[36] CBA, "Main Indicators of Financial Institutions," May 2013
[37] IMF (January 11, 2013). *Financial System Stability Assessment Report*. http://www.imf.org/external/pubs/ft/scr/2013/cr1310.pdf
[38] IMF (January 11, 2013). *Financial System Stability Assessment Report*. http://www.imf.org/external/pubs/ft/scr/2013/cr1310.pdf
[39] See Annexes 2 and 4 for criteria regarding regulatory classification of loans.
[40] http://www.imf.org/external/pubs/ft/scr/2013/cr1310.pdf
[41] http://www.imf.org/external/pubs/ft/scr/2013/cr1310.pdf

exchange rate risk to the borrowers, translating it into credit risk for the banks. Nevertheless, the banking sector emerged from the March 2009 AMD depreciation rather unscathed.[42] There are very few hedging mechanisms available, with the most well-known one being a Dutch currency exchange fund TCX. The cost of this mechanism, however, is prohibitively expensive, according to banks interviewed. The CBA absorbs some foreign currency risk by taking loans from development institutions in foreign currency and on-lending the funds to local financial institutions in dram.

3.2.3 Regulation and state support

The regulatory environment is well developed and conducive to banking sector development and expansion. The banking sector has been regulated by the CBA, an independent body, since 2006. The Armenian Law "On Banks and Banking" regulates the activities of Armenian banks and terms of supervision of banking.

Overall, Armenia's regulatory and supervisory framework is strong, with what IMF labels a "well-resourced and skilled" CBA covering the whole financial sector.[43] The Armenian banking sector weathered the financial crisis very well, aided by subordinated loans with long term maturity (at least 5 years) from the CBA to an amount matching the capital injection provided by bank shareholders.[44] Ten banks availed themselves of this offer in a total amount of AMD 30.3 billion (EUR 56.4 million) according to the IMF. In addition, the government provided about AMD 60 billion (EUR 111.7 million) in guarantees for lending to SMEs oriented towards exports or production for the domestic market.[45]

The CBA has made many attempts to limit dollarization, including high risk weights and provisioning charges on dollar assets introduced in 2010. For instance, the CBA imposes a risk weighting of 150% for foreign currency denominated loans, vs. 100% for local currency. Also, required provisions for the three middle categories (watch, sub-standard and doubtful) are higher for FX-denominated loans than for those in AMD. Finally, there are higher reserve requirements on dollar deposits (8% for AMD deposits and 12% for FX deposits).

The list of prudential ratios for banks applied by the central bank is presented in Annex 3. A short description of key regulations is presented in Annex 4.

3.2.4 Funding

Deposits: Commercial banks are primarily funded by deposits, which made up 61.6% of total banking sector liabilities (48.8% of liabilities and equity) as of May 31, 2013. More than half of banking sector deposits (53.3% as of May 31, 2013)[46] were term deposits and a very high 70.7% were in foreign currency, mostly USD. This is up from only 41.0% as of YE07, well before the steep depreciation of the AMD in March 2009 and the events leading up to the depreciation.

Generally speaking, deposits are cheaper than borrowings. Foreign currency denominated deposits, especially, are the cheapest. On average there is a 4% gap between rates for USD deposits and those in AMD, with one year USD deposits costing between 6% and 8%. One year AMD-denominated deposits, on the other hand, cost from 11% to 13%. Rates increase with tenor and deposit amount.

[42] http://www.imf.org/external/np/sec/pr/2013/pr1315.htm
[43] http://www.imf.org/external/pubs/ft/scr/2013/cr1310.pdf
[44] CBA meeting (February 11, 2013)
[45] IMF (January 11, 2013). *Financial System Stability Assessment Report*. http://www.imf.org/external/pubs/ft/scr/2013/cr1310.pdf
[46] Excluding non-resident deposits, which made up 24.5% of total deposits

Structure of banks' liabilities and equity

%	May 31, 2013
Customer deposits[47]	48.8
Loans from FIs, including CBA	28.0
Other liabilities	15.7
Equity	7.5
TOTAL	**100.0**

Source: CBA

Borrowings: Borrowed funds made up a not insignificant 23.6% of liabilities as of the same date, with much of this funding coming from IFIs and, to a lesser extent, the Government of Armenia. The largest IFI funders include the EBRD, IFC and German state development bank KfW. While much of this funding is specifically for on-lending to SMEs, as will be discussed in the Supply Analysis section, some of it is for other purposes such as energy efficiency projects (IFC). Banks also receive borrowed funds from resident commercial banks and from foreign commercial banks, such as Citibank and Commerzbank, although this type of funding is in much shorter supply.

Fixed rates on USD denominated borrowings cost, on average, from 4% to 8%. AMD-denominated loans are more expensive, at 10% to 15%. Floating rates are made at LIBOR plus 4% to 5%.

The Government of Armenia provides banks with local currency funds through the CBA, which channels such funds through several mechanisms. One of the most present channels is the German Armenian Fund (GAF), established by the CBA in 1999 and originally funded by KfW. The GAF now channels several sources of funding for a variety of purposes, including renewable energy and housing finance. GAF's SME-specific funding will be discussed further in the Supply Analysis section.

Subordinated debt: Very few banks hold subordinated debt, with the exception of those that accessed the funds made available by the CBA in the wake of the financial crisis. A few banks hold subordinated debt from their shareholders, such as Unibank and Anelik Bank. Unibank holds USD 5.0 million (EUR 3.8 million) in subordinated debt from its main shareholder, thus boosting regulatory capital and the bank's CAR. Likewise, Anelik Bank has USD 4.0 million (EUR 3.0 million) in subordinated debt from one of its shareholders, at a 7.0% interest rate.

Long-term funding: Long term funding (i.e., more than five years) is in very short supply, although such funding is generally only needed for the mortgage sector. The establishment of a mandatory pension system is expected in 2014,[48] which will make available a source of long term financing for financial institutions to be invested back in the economy.

Parent company funding: It is not uncommon for banks to receive equity injections or subordinated debt from their parent company. In 2011 the shareholders of ACBA-CreditAgricole increased its share capital by EUR 35.7 million. In July 2012 Anelik Bank received subordinated debt from its majority shareholder, CreditBank sal, of about EUR 2.9 million. Likewise, Unibank received EUR 3.8 million in subordinated debt to boost regulatory capital and the bank's capital adequacy ratio.

[47] Includes time deposits and "demand liabilities" from legal entities and households
[48] CBA (August 2012). *Financial System Report 2011*

3.3 Microfinance sector

3.3.1 Structure

Non-bank credit institutions (NBCI) include 12 microfinance institutions (MFIs), 13 general credit organizations, one credit union, four mortgage companies and three leasing companies. The MFIs account for 43.5% of total NBCI loans outstanding as of March 31, 2013, and the general credit organizations and credit union accounted for another 28.1%. NBCIs made up about 6.4% of total financial system assets as of December 2012.

The Armenian microfinance sector in particular is highly competitive and dominated by a few key players, including FINCA and Aregak, which are the two largest NBCIs. FINCA, originally founded as a charitable foundation in Armenia in 1999 before transforming to a NBCI, has a total loan portfolio of EUR 37.3 million and 53,066 clients.[49] It is currently taking the initial steps to transform into a bank, although there are rumors that its interest rates are still too high to qualify. Aregak was founded by US NGO UMCOR and had a total loan portfolio of EUR 20.5 million and 28,146 active borrowers as of December 31, 2012. Unlike banks, MFIs are not as concentrated in Yerevan. For instance, FINCA has 27 branches, only four of which are in the capital.

General credit organizations are focused primarily on consumer lending with some pawn-shop related activities. In general they do some SME lending, although this is not their main area of focus. Leasing companies are discussed in more detail below.

3.3.2 Performance

NBCIs have shown strong performance over the past few years, with higher capitalization than commercial banks and solid profitability. Total assets of credit organizations grew 36.1% in 2012 and total capital grew 34.2%. NBCIs achieved an ROA and ROE of 3.3% and 8.8%, respectively, in 2012, down from 6.8% and 17.5% a year earlier.[50] Total capital to risk weighted assets was a high 34.1% as of May 31, 2013.[51]

3.3.3 Regulation

NBCIs are regulated by the CBA under the 2002 *Law on Credit Organizations*. By regulation, they are not allowed to perform many banking functions, such as accepting deposits, issuing cards, or offering money transfer or remittances services. Minimum capital requirements differ by type of entity, but NBCIs are required to have at least EUR 276,000 in statutory and total capital. They are also required to have a minimum CAR of 10%.

3.3.4 Funding

Since NBCIs are not allowed to mobilize deposits, they rely solely on borrowings, especially from donors and other foreign sources, and their own capital. As of May 31, 2013, 35.4% of all credit organizations' liabilities were from funds attracted from banks, with another 25.2% from funds attracted from other financial institutions, including various IFIs and DFIs. For instance, FINCA works with up to 13 lenders including Triple Jump, Symbiotics, ResponsAbility, Blue Orchard, Oikocredit, Triodos and FMO, the Dutch development agency. Local currency funding is in shorter supply than USD or EUR denominated loans, but some lenders, such as the EBRD, are lending in AMD. FINCA also has access to the Russian Federation funds, hedged by the CBA, for which they pay 9%. Hard

[49] Source: FINCA Armenia's website

[50] As calculated under CBA requirements. Under IFRS ROA and ROE were 3.9% and 10.5% in 2012

[51] Source: Main Indicators of Financial Organizations, May 2013, CBA. Note: Includes only data on NBCIs that attract borrowings through public offers under their charters.

currency loans are considerably cheaper, at about 6.5%, than AMD-denominated loans, which are upwards of 15% to 18%. The longest maturity on any of FINCA's loans is five years, to match the maximum maturity on its own loan portfolio.

3.4 Private equity and venture capital

3.4.1 Sector overview

Armenia's private equity/venture capital sector is highly underdeveloped, with only one local fund which is in its nascent stages. This fund, the Granatus Venture Fund I, managed by local firm EV Consulting, was in the process of being registered as of early August 2013. The fund will raise an anticipated USD 6.0 million (EUR 4.5 million), half of which will come from the World Bank, guaranteed by the government, and the other half from private individuals, many of whom are part of the Armenian diaspora. Funds will mainly be invested in scalable start-ups in the IT sector, with a focus on high tech. The fund will take minority equity stakes in six to 12 portfolio companies. Exit will likely be through strategic sale.

In March 2012 SEAF established the Caucasus Growth Fund (CGF), registered as a limited liability company in the Cayman Islands and investing in growth oriented SMEs (annual turnover of less than USD 50.0 million, or EUR 38.0 million) in Georgia, Armenia and Azerbaijan. The ultimate fund size is expected to be USD 75.0 million with USD 48.0 million committed as of July 2013. Investors include SEAF itself as well as several IFIs (EBRD, IFC, FMO, and BSTDB). CGF will focus on straight equity investments in more established companies, with an investment size of up to USD 6.0 million. As of July 2013, CGF had made one investment in Armenia, in a distribution company. The SEAF-Armenia team expects to have made two more investments by the end of 2013 and another two to three in 2014. Interesting sectors include IT and pharmaceuticals.

A small amount of equity financing is provided to SMEs through "SME Invest," a registered NBCI that started in 2009. In addition to its lending operations, SME Invest takes minority shares in companies, with an individual investment size of up to AMD 150 million (EUR 276,000), denominated in local currency. In 2013, SME Invest has allocated AMD 6.6 billion (EUR 12.8 million) for investments in SMEs, EUR 281,000 of which will come from the government's budget.[52]

3.4.2 Ecosystem

There is no government support system or programs for private equity or venture capital in Armenia, as it is an extremely new concept. CGF is accompanied by a limited capacity building fund, but no broad based programs, either publicly or privately funded, with considerable outreach. There are no known incubators or angel investor networks. In general, Armenian business owners are used to being sole shareholders that don't share decision making power with outside investors.

3.4.3 Regulation

Private equity and venture capital funds are regulated by the 2010 *Law on Investment Funds*. To date, the Granatus Venture Fund I is the only fund that has been registered under this law, which is fairly liberal. Foreign funds are not subject to local regulation, and there is no limit on repatriation of profits. In general, supervision of funds is limited, and they have the option to not register with the CBA.

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http://arka.am/en/news/business/about_30_of_enterprises_supported_by_sme_development_national_center_survive_in_their_first_year_/?sphrase_id=930351

3.5 Other financial sector institutions

3.5.1 Leasing companies

The leasing market is overwhelmingly dominated by one player, ACBA Leasing, majority owned by ACBA Bank, the second largest bank in Armenia by total assets.[53] ACBA Leasing, established in 2003, now controls about 92% of the market with a total portfolio of EUR 18.8 million and 600 contracts, all of which are finance leases. ACBA Leasing works with 125 main suppliers across all sectors, including automotive, medical equipment, agriculture, mining, packaging/delivery and food processing.

While ACBA Leasing is the main provider, there are other much smaller players including Unileasing (a subsidiary of Unibank, holding about 5% market share) and Agroleasing (established with the assistance of the U.S. Department of Agriculture, holding about 3% market share). Some MFIs, such as Pharm Credit, CARD AgroCredit and NOR Horizon, also offer leasing products but have negligible market shares.

Like MFIs, leasing companies are registered as NBCIs, also regulated by the CBA under the 2002 *Law on Credit Organizations*. Leasing activities are also defined by the Civil Code, and a specific law covering leasing is currently under consideration.[54] The leasing sector suffers regulatory disadvantages in comparison with lending. For instance, SMEs that import equipment over USD 300,000 are allowed to defer the VAT for up to two years at customs. This benefit does not apply to leased equipment, however, creating a disincentive for customers to take out a lease versus a loan. On the positive side, ACBA Leasing has proposed an accelerated amortization schedule for leased products, with approval expected imminently. A 2007 law allows for the registry of leases in the national cadastre.

As leasing companies are not allowed to attract deposits from the public, they are solely dependent on borrowings and their own capital to fund their business. ACBA Leasing works with several IFIs, including the EBRD and IFC, along with some private investment funds, to fund its portfolio. The majority of its borrowings are in USD, to match its underlying portfolio, 72% of which is in USD.

3.5.3 The stock exchange

The Armenian stock exchange was established in 2000 and acquired by Nordic stock exchange operator NASDAQ[55] in 2008. Instruments traded on the stock exchange include stocks, corporate bonds, government and central bank bonds, repurchase agreements on corporate bonds, currency, as well as credit resources. The CBA is the supervisory and regulatory authority for the stock exchange and the Armenian capital market,[56] covered under the 2007 *Law on Securities Market*. The level of supervision is light in comparison with supervision of banks. [57]

Armenia's stock market is very illiquid, with only a few equities which are traded. Trading is thus dominated by corporate and government bonds which represent 70.3% and 21.8% of trades, respectively, with equities accounting for just 7.9% of the total as of YE12.[58] Total market capitalization is EUR 48.0 million, less than 1% of 2012 GDP.[59]

[53] As of March 31, 2013
[54] OECD Eastern Partner Countries SME Policy Index 2012
[55] OECD Eastern Partner Countries SME Policy Index 2012
[56] http://www.nasdaqomx.am/en
[57] OECD Eastern Partner Countries SME Policy Index 2012
[58] CBA. *Financial Stability Report 2012.*
[59] Source: http://www.nasdaqomx.am/en/market.htm

In order to issue stocks, a business must meet the minimum equity requirement of EUR 920,000 and have been operational for at least three years with at least three years of audited financial statements by an independent auditor. For a corporate bond issuance, minimum capital required is EUR 460,000 and the business must have been operational for at least two years, with one year of audited financials.

4. DEMAND ANALYSIS

Conclusion:
The SME sector in Armenia is growing rapidly, encouraged by pro-SME government policies and improvements in the business environment.

Key findings:
- *While SMEs account for the majority of total businesses in Armenia, their contribution to GDP, employment, foreign trade and foreign investment remains disproportionately low.*
- *SMEs are most present in the trade sector, followed by the industry and agriculture sectors; nearly half of all SMEs are located in Yerevan.*
- *Overall the regulatory environment is favorable for businesses, although some procedures are still especially burdensome for SMEs, particularly in terms of taxation and foreign trade.*
- *Demand for loans is much higher than for other product types, although there is growing interest in leasing.*

4.1 Size and growth of the segment

4.1.1 Size and definition of the sector

Armenia has a large and growing MSME sector. As of January 1, 2010, the country's 132,923 MSMEs made up 97.7% of total registered legal entities and sole proprietors in Armenia, according to the country's pre-2011 definition of the sector, of which 75.9% were microenterprises, 16.8% were small and 5.0% were medium. The number of MSMEs combined grew by 66.7% between 2006 and 2009, with the biggest increase in 2008 of 58.7%.

As of January 1, 2011 the government redefined SMEs to be more in line with EU-standards by number of employees,[60] as stated in the Law of the Republic of Armenia on State Support of Small and Medium Entrepreneurship. The government agency tasked with SME development has yet to collect nationwide SME figures under the new definition.

	Micro	Small	Medium
Before 1/1/2011			
Headcount	≤ 5	≤ 50 in industry and other productive spheres, ≤ 25 in construction and power engineering; science and education, ≤ 15 in transport, trade and services	≤ 100 in industry and other productive spheres, ≤ 50 in construction and power engineering; science and education, ≤ 30 in transport, trade and services
After 1/1/2011			
Headcount	≤ 10	10 - 50	50 - 250
Annual Turnover	≤ AMD 100 m (EUR 0.2 m)	≤ AMD 500 m (EUR 1.0 m)	≤ AMD 1,500 m (EUR 3.0 m)
Annual Balance Sheet Total	≤ AMD 100 m (EUR 0.2 m)	≤ AMD 500 m (EUR 1.0 m)	≤ AMD 1,000 m (EUR 2.0 m)

[60] Annual turnover and annual balance sheet total figures are specific to Armenia and much lower than under the EU definition of SMEs.

4.1.2 Importance of the sector

Despite accounting for the overwhelming majority of total enterprises, MSMEs in Armenia contribute a disproportionately low amount to GDP, employment, foreign trade and foreign investment. Using the latest data, MSMEs accounted for only 42.2% of the employed population in 2009 (32.6% for SMEs only), up from 35.1% three years earlier. Likewise, MSMEs contributed 42.5% to GDP in 2009 (32.1% for SMEs only), up from 41.0% in 2007. MSMEs accounted for a mere 17.7% of total exports and 26.2% of total imports in 2009, where imports were down from 37.3% in 2007, pre-financial crisis. Finally, MSMEs accounted for a very small 7.8% of total foreign investments in 2009.

MSMEs, Contribution to total

%	2009	2008	2007	2006
Employment	42.2	42.1	40.7	35.1
GDP	42.5	41.7	41.0	40.3
Export Turnover	17.7	17.9	17.4	16.9
Import Turnover	26.2	37.8	37.3	36.8
Foreign Investment	7.8	8.0	8.4	8.4

Source: SME DNC

MSMEs' reported contribution to business output and employment may be understated due to the presence of informal enterprises and tax avoidance. The old definition of SMEs on which the statistics are based, with an upper boundary of just 30 to 100 employees, depending on sector, also plays a role in the apparently low contribution to employment and turnover. When statistics are re-calculated using the new definition, the economic contribution will naturally be higher.

4.2 Characteristics of SMEs

MSMEs are dominated, in number, by microenterprises, although this figure has been declining over time, from 82.4% of total registered entities in 2006 down to 75.9% in 2009. Meanwhile, small and medium enterprises increased their share, with the share of medium enterprises more than doubling from 2.1% to 5.0% over the same time period. The percentage of large enterprises stayed mostly steady between 2006 and 2009.

Number of enterprises by size, percent of total

%	2009	2008	2007	2006
Micro	75.9	74.0	82.6	82.4
Small	16.8	18.3	12.7	13.2
Medium	5.0	5.4	2.5	2.1
Large	2.3	2.3	2.2	2.3

Source: SME DNC

There is no available break-out of MSMEs by economic sector, but as of 2009 MSMEs accounted for the highest number of companies in most sectors, but especially trade (98.9% of total businesses operating in the sector), industry (95.0%), agriculture and food processing (93.4%). SMEs also accounted for 68.8% of employment in the trade sector, more than any other sector. The second highest was services, at 45.0% of total employment in that sector. The high presence of SMEs in the trade and services sectors is not uncommon to countries in the region. Similarly, the largest GDP contribution SMEs made was to the trade sector, where SMEs contributed 49.4% of total trade GDP in 2009.

MSMEs by sector, as % of total enterprises

%	2009	2008	2007	2006
Trade	98.9	98.8	99.3	99.3
Industry	95.0	94.6	91.6	92.3
Agriculture	93.4	93.7	92.8	94.4
Services	90.5	89.9	89.6	86.9
Construction	89.6	89.6	90.1	90.0
Transport & communication	87.3	85.4	87.0	81.1 (T) and 87.7 (C)

Source: SME DNC

Not surprisingly, MSMEs account for the highest percentage of both GDP and employment in the trade sector, at 49.2% of GDP and 68.8% of employment. They also contributed a high percentage to the services sector, at 45.0% of GDP and employment.

MSME contribution to GDP, by sector

%	2009	2008	2007	2006
Industry	30.6	22.3	27.9	26.5
Construction	37.2	48.5	41.2	47.8
Trade	49.4	51.4	47.3	45.5
Transport & Communication	28.0	20.8	28.6	27.7
Services	45.0	45.0	42.3	41.9
Total	**42.5**	**41.7**	**41.0**	**40.3**

Source: SME DNC

MSME contribution to employment, by sector

%	2009	2008	2007	2006
Industry	31.2	30.3	30.0	31.6
Construction	37.2	48.5	42.9	43.7
Trade	68.8	67.8	76.1	79.1
Transport & Communication	17.6	18.0	16.1	13.7
Services	45.0	45.0	25.0	22.9
Total	42.2	42.1	40.7	35.1

Source: SME DNC

Not surprisingly, SMEs are rather urbanized, with 46.5% of all SMEs located in Yerevan. This percent had remained mostly steady over the previous three years, although it is down from 2006.

MSMEs, by number of total enterprises

%	2009	2008	2007	2006
Yerevan	46.5	47.3	46.0	49.0
Rest of the country	53.5	52.7	54.0	51.0

Source: SME DNC

In 2006, legal entities made up 52.4% total SMEs, with the remaining portion made up of sole proprietors. By 2009, these figures had traded places, with sole proprietors overtaking legal entities in 2008, to then comprise 55.3% of all SMEs by 2009.

MSMEs, by sole proprietors and legal entities

%	2009	2008	2007	2006
Sole proprietors	55.3	52.8	47.4	47.6
Legal entities	44.7	47.2	52.6	52.4

Source: SME DNC

While the number of SMEs continues to grow, the SME DNC reported a few obstacles to growth of individual businesses, namely, a lack of access to international markets or export opportunities. Related to this, Armenian SMEs do not produce products that are up to international quality standards, further limiting their potential to export.

4.3 Performance

There is no specific data available on the performance of SMEs, although nearly all banks surveyed report a lower NPL figure for their SME loan portfolio, often well below 2%, than their portfolio as a whole. This suggests that SMEs that qualify for a loan from a commercial bank are likely maintaining satisfactory profitability, sufficient to meet their loan obligations.

Up until 2009 ArmStat collected data on the financial performance of all "organizations" in the country, with the performance of large and medium-sized organizations shown separately, in addition to the overall performance of all organizations. According to this data, sectors with the highest return on assets (ROA) in 2008 were trade and financial intermediation, with ROAs of 16.6% and 31.7%, respectively. For the trade, transport & communications and hotels & restaurants sectors, the ROAs for the large and medium-sized enterprises were lower than the total ROA for the sector, indicating superior financial performance by the small enterprises. It was the opposite case for most other sectors, especially manufacturing, mining, construction, financial intermediation and agriculture, with large and medium enterprises outperforming smaller ones.

4.4 Institutional and regulatory issues

Through a strong institutional support system, Armenia has proactively and explicitly promoted the development of the SME sector, as laid out in the *Concept for SME Development Policy and Strategy in Armenia*, first adopted by the government of Armenia in 2000 and currently under revision. The Ministry of Economy is authorized to elaborate SME development strategy, and in 2002 the SME Development National Center of Armenia (SME DNC) was formed to carry out specific pro-SME initiatives, including loan guarantees and start-up support. It also offers a wide range of technical support functions, including business training, information support and "local economic development," undertaking economic development initiatives based on competitive advantages of individual communities. With such a government support structure in place, Armenia has paved the way for a strong SME sector to take hold and grow.

Armenia's strong support structure is reflected in its high score from the OECD's SME Policy Index study in the area of "operational environment for SMEs," based on extensive deregulation initiatives.[61] At the same time the Ministry of Economy is devising a centralized system for impact assessment on SMEs in particular. The OECD's SME Policy Index study assigned Armenia a middling score for "entrepreneurial learning and women's entrepreneurship," which is not explicitly a part of the state's SME strategy.

[61] OECD Eastern Partner Countries SME Policy Index 2012

In December 2010 the Ministry of Economy devised a plan to address many weaknesses identified in the World Bank's *Doing Business* report. Overall, Armenia has seen steady improvement in its "ease of doing business" ranking, from 61st down to 32nd out of 185 countries as of 2013. This rank is well below the regional average of 73. Under the same study, the country ranks especially high on the "ease of starting a business" metric, with a ranking of 11 out of 185, reflecting the implementation of a one-stop-shop system for business registration, 0% required paid-in capital and a cost of 2.5% of income per capita. In addition, Armenia has a particularly high ranking (4th) in "registering property," a process that requires three procedures, seven days and on average costs only 0.2% of the property value. SMEs benefit from this ease in particular, as most banks require immovable property as collateral on SME loans.

Where Armenia falls short is in its scores for "trading across borders" and "paying taxes," with ranks of 107th and 108th, respectively. The "trading across borders" rank explains SMEs' low contribution to total exports and imports. It takes 13 days to export and 18 days to import and costs, on average, EUR 1,357 per container to export and EUR 1,640 to import. Such conditions are not favorable to any business, especially SMEs with more limited resources. For paying taxes, companies are required to make 13 payments throughout the year (down from 34 in 2012), taking, on average, 380 hours. Despite this low score, Armenia has shown the greatest improvement in the "paying taxes" category, demonstrating its commitment to improving the business environment. The SME DNC reports that SMEs receive some preferential treatment with regard to taxes: companies with turnover of less than AMD 58.8 million (EUR 109,000) are not required to pay VAT and self-employed individuals pay fixed quarterly payments, thus reducing the tax burden.

Armenia's Doing Business Rankings

Doing Business Category*	2013 Rank	2012 Rank
Ease of starting a business	11	10
Registering property	4	4
Getting credit	40	38
Paying taxes	108	152
Trading across borders	107	106
Getting electricity	101	143

Source: Doing Business 2013

*This column only includes the Doing Business indicators most relevant to SMEs

While many of these widespread reforms were not designed to cultivate the SME sector specifically, SMEs have benefited enormously from them. SMEs are more likely to lack access to finance than a large company, thus directly benefit from regulations allowing greater access to credit, a score in which Armenia has shown significant improvement over the years. Likewise, they spend disproportionately higher resources on registration than a large company.

Corruption and a pervasive informal economy still remain an issue in Armenia, as reflected in a ranking of 105th out of 176 economies in Transparency International's Corruption Perception Index 2012 (up from 78th in 2003[62]).

4.5 Innovation

While Armenia specifically supports innovation through its state SME development policy, Armenian SMEs have not historically been considered particularly innovative. This is starting to change, however, with some sectors in particular showing strong signs of innovation. The IT sector, for

[62] Source: http://cpi.transparency.org/cpi2012/results/

instance, is becoming more innovative, transitioning from an outsourcing model, where foreign IT companies outsourced certain processes to Armenia, to one that is more focused on internal product development. Likewise, the pharmaceuticals sector is starting to develop, importing technology from the EU.

In order to be able to grow, such companies require access to export markets and support for a strong R&D function. The government supports innovative companies through the SME DNC, through both loan guarantees and direct financing, as discussed further in the Supply Analysis section of this report.

To date, there are no operational venture capital funds,[63] incubators, angel investor networks, or similar support structures for innovative startups, with the exception of SME Invest, which is small in scale. The large Armenian diaspora may in fact have a negative effect on innovation through brain drain. There are no preferential tax benefits for start-ups.

Box 1: Example of innovative SME

Zangi is a new generation telecommunication system launched in November 2012 by Yerevan-based company BeInteractive. Zangi allows users to communicate with one another as if they were subscribers of the same mobile network in the same country, seamlessly working across different platforms such as iOS, Android and Blackberry. Like Skype, Zangi utilizes VoIP technology but unlike Skype there is no concept of online or offline. There are a few other operators in the world offering such technology, but this is the first Armenian company of its kind. The company requires start-up capital to realize its plans for eventual international expansion.

4.6 Demand for finance

4.6.1 Overview

Demand for loan financing from SMEs is high, while demand for non-loan products is either low, in the case of leases, guarantees and LCs, or virtually non-existent, in the case of risk capital. In general, financial literacy in Armenia is quite low, as stated by the banks surveyed. Therefore, the main driver of low demand for non-loan products may be more a reflection of a lack of understanding of these products than a lack of need on the market.

4.6.2 Estimate of demand

The demand for loans from MSMEs in Armenia is estimated at roughly EUR 944 million, which is equivalent to 12.1% of 2012 GDP and 30.4% of the outstanding loans of all financial institutions in Armenia at year-end 2012. The calculation is made as follows:

Calculation of demand for loans from SMEs

Step in Calculation	Value	Source
A. Number of SMEs	26,194 (small) 7,796 (medium)	SME DNC statistics[64]
B. Average loan size demanded (EUR)	34,366 (small) 97,386 (medium)	BFC survey of local lenders
C. % of enterprises needing a loan	51.4% (small)	World Bank Enterprise Surveys[65]

[63] Excluding Granatus Venture Fund I, as it is still in the process of registering
[64] Figures are based on SME DNC's 2009 figures for the number of small and medium enterprises, grown at the same rate of GDP to get to 2012 figures

	57.8% (medium)	
D. Total demand (EUR million)	**944.2**	**= A * B * C**

The demand estimate is only intended to give a general idea of the level of demand. The methodology of the calculation is simplistic and is based on a number of assumptions. The following points should be kept in mind:

- A current estimate of the number of small and medium enterprises was based on 2009 data provided by the SME DNC and grown at the same rate as GDP for each year. This methodology was used due to highly uneven historical growth in the number of SMEs.
- Since there is no available survey data on the loan size demanded from small and medium enterprises, the average loan size disbursed was used as a proxy for loan size demanded. The average loan sizes disbursed to small and medium enterprises are based on a survey of nine commercial banks that provided detailed quantitative information on their MSME portfolios. The average disbursed loan size may somewhat underestimate the average demanded loan size, to the extent that financial institutions may be overly conservative in setting loan amounts.
- Each bank uses a different definition of small and medium enterprises, rarely in line with the government's definition, which reduces the accuracy of the estimate.
- The World Bank surveys were conducted from late 2008 to early 2009, and thus may not accurately reflect current demand conditions.

There is no reliable data which could be used to estimate the demand for non-loan products, such as risk capital, leases and LCs.

4.6.2 By type of SME

The following table, taken from the World Bank Enterprise Survey conducted from late 2008 to early 2009, presents two indicators of demand for funding – the proportion of respondents not needing a loan and the proportion identifying access to financing as a main constraint – broken down by sector, enterprise size, and region.

Demand indicators by enterprise characteristics, based on World Bank Enterprise Survey

	% not needing loan	% identifying access to financing as a main constraint
By sector:		
Manufacturing	30.7	27.8
Retail	36.3	43.0
Other services	53.1	29.6
By enterprise size:		
Small (5-19 employees)	48.6	37.3
Medium (20-99 employees)	42.2	29.5
Large (100+ employees)	20.9	19.8
By region:		
Yerevan	41.8	34.3
Southeast	47.5	20.9
Southwest	54.9	17.6

[65] The World Bank surveys report the % of enterprises not needing a loan, from which the percent of enterprises needing a loan is inferred as 100% minus the % not needing a loan.

North	46.0	46.4

Source: World Bank Enterprise Survey (2009)

Sector: Based on this survey, the retail sector is the most likely to see lack of access to financing as a constraint. This finding is consistent with reports from financial institutions, as the trade sector dominates most banks' SME loan portfolios, suggesting overall high demand from the sector in general. In general, the trade and services sector, as well as light industry and processing, have high demands for working capital loans of up to 36 months.

Enterprise size: In comparison with large enterprises, SMEs, and especially small enterprises, are more likely to see access to finance as a major constraint. This is again consistent with GAF data, which shows the bulk of sub-loans going to small enterprises, indicating the highest demand from these enterprises. Interestingly, small enterprises also reported the highest percent of companies not needing a loan under the enterprise surveys, perhaps due to a higher reliance on their own funding.

Location: SMEs in Yerevan reported the smallest percent of companies not needing a loan, indicating the highest demand in that region. Likewise, Yerevan-based SMEs are the second most likely to perceive access to finance as a constraint, after those in the north. Demand from SMEs in the regions appears lower, although possibly due to a lack of exposure to loan products or a lower level of financial literacy.

4.6.3 By instrument

Loans: Loans are by far the preferred source of funding for SMEs in Armenia, as they are the most familiar to entrepreneurs and are also the most readily available. SMEs tend to prefer USD denominated loans, since the interest rates are on average 4% lower than for AMD loans, despite having to also incur currency risk, as their revenues are very often in local currency, with the exception of a small set of exporters. Banks acknowledge that if AMD denominated loans were available at reasonable rates, there would be much more demand for such loans.

Leases: Demand for leases is much lower than demand for loans for a number of reasons, including greater familiarity with loan products and the regulatory disadvantage in terms of VAT treatment, as discussed in the Financial Sector Overview. Leasing companies are attempting to educate potential customers on the benefits of leases, such as reduced collateral requirements, but further promotional efforts are needed. Demand for leases is highest in the construction, wholesale and retail trade and transportation sectors. Other sectors that commonly take out leases include food and agriculture processing, metallic and non-metallic materials and fish farming.

Guarantees/letters of credit: Demand for guarantees and letters of credit is low in general, with banks reporting very low volumes of such products to SMEs. The main constraint to demand is a perceived lack of need for LCs – businesses have been engaging in trade successfully without the use of documentary operations in the past, and thus see little need to experiment with different payment formats. As with leasing, lack of familiarity with the products is another key factor.

Equity and quasi-equity: Demand for equity and quasi-equity from SMEs is very low in Armenia, mostly due to a lack of awareness of such instruments. There are also cultural issues at play: namely, SME business owners are more comfortable as sole shareholders and are hesitant to share decision making power with outsiders. Also, many business owners, especially of medium-sized companies, view interest rates as inexpensive enough that they do not need equity capital. From SEAF's experience, the sector most familiar with the properties and terms of private equity capital is the IT sector, while the agriculture sector is the least familiar.

5. SUPPLY ANALYSIS

Conclusion:
Bank lending is the largest source of funding to SMEs in Armenia. Leasing companies show a strong commitment to the sector but are limited by a lack of funding.

Key findings:
- *The government provides direct financing to SMEs, although outreach and scope is limited*
- *Banks' SME loan portfolios are dominated by loans to the trade sector, with potential for growth in the food processing sector*
- *Funding for commercial banks is plentiful with the exception of long term local currency funding; leasing companies suffer from lack of funding in any currency*
- *Armenia is one of few countries in the region with a program providing guarantees directly to SMEs; due to the program's small size, however, a new guarantee fund could have a positive impact on SME lending*

5.1 Number and type of intermediaries

Banks: Bank lending is by far the largest source of SME funding in Armenia by volume. All of Armenia's 21 commercial banks claim to lend to the SME sector, with some more committed to the sector than others. Across the board SME lending is a fairly new product line, developed within the last six years, although post-financial crisis many banks are seeking to prioritize this sector, in some cases aiming to build it up to 50% of their loan portfolio. Most banks also provide non-loan funding to SMEs in the form of letters of credit, guarantees, and (to a lesser extent) leases. One bank, ProCredit Bank, is focused solely on the MSME sector.

MFIs: The country's 12 microfinance institutions do not draw a strong distinction between micro lending and SME lending, but most offer business loan products of up to AMD 5.0 million (EUR 38,000). Consequently, MFIs are typically only reaching the lower end of the small business market, with no lending to medium enterprises. Overall SME lending volume by MFIs remains low, especially when compared to bank lending.

Leasing companies: The majority of leasing companies' portfolios is comprised of leases to MSMEs. The major player, ACBA Leasing, states that 95% of its total portfolio is to SMEs, with another 3% to microenterprises. There are two other standalone leasing companies, legally registered as NBCIs, although there is no data available on the breakdown of their lessees by size. There are also three microfinance institutions that offer leasing to their clients, although volume is low. Some banks include leasing in their list of product offerings, but are not very active in this sector and do not have a separately registered leasing entity.

General NBCIs: While Armenia's 14 general NBCIs[66] are more focused on consumer lending and pawnshop-related lending than SME lending, the majority include small business loans in their suite of product offerings. Banks did not cite credit organizations as strong competitors in this sector.

Private equity / venture capital firms: The Caucasus Growth Fund is the only currently operational private equity fund offering financing to SMEs. The target fund size is USD 75 million, but this is to be split between Georgia, Armenia and Azerbaijan, with the largest share going to Georgia. Average

[66] Non-MFI, non-leasing, non-mortgage

investment size is USD 500,000 to USD 6.0 million. There are no venture capital firms currently active in Armenia, although Granatus Ventures Fund I is currently being registered and will make early stage investments in entities with long term growth potential. With a total fund size of only USD 6.0 million, outreach will be limited.

Government programmes: The government offers direct financing to SMEs through the SME DNC. The SME DNC supports SMEs through the use of loan guarantees, seed capital and equity financing.

- **Loan guarantees** provide up to 70% coverage (100% for start-ups) on the principal of loans of up to five years and under AMD 15.0 million (EUR 27,600) for SMEs in the manufacturing, services and trade sectors. Through this program, loans are extended through SME DNC's partner financial institutions, which include seven banks and four universal credit organizations.[67] Since the inception of the guarantee program in 2004, the SME DNC has issued 439 guarantees to operating SMEs and 487 to start-up SMEs. The total guarantee fund was originally EUR 1.5 million and an additional EUR 1.5 million will be allocated in November 2013, funded by the Asian Development Bank. Although the program is limited in terms of available funding and thus has reached a modest number of beneficiaries since inception, the participating financial institutions have reportedly not identified any specific drawbacks to this program in terms of its eligibility requirements or operating procedures.
- **Seed capital** is provided to SMEs that have participated in the SME DNC's "Start-up business support program," which provides training, professional consulting, provision of information and in some cases financial support to start-ups. Over the course of seven months, this program works with entrepreneurs to acquire skills in business planning, marketing, management, production and financial planning.[68] Outreach of this program is limited, with 200 entities participating in 2012, 120 of which received seed capital at the end. Figures are expected to be similar in 2013.
- **Equity financing** is provided by the SME DNC affiliated "SME Invest," as previously discussed in the Financial Sector Overview.

Armenian banks expressed an interest in participating in future guarantee funds, if EIB were to establish one. One bank believes such a scheme could increase loan disbursements by 10% to 20%, while another loosely projected a 5% month on month increase. All banks questioned asked for more concrete information, specifically about the definition of SMEs and SME eligibility criteria.

Number of financial intermediaries serving SMEs*

Type	Number
Banks	21
MFIs	8[69]
Credit Organizations	14
Leasing companies	3[70]
Private equity firms	1

** BFC estimate*

[67] VTB Armenia, ArmBusinessBank, Armenian Development Bank, ArdshininvestBank, Unibank, Anelik Bank, Inecobank, SME Invest UCO, Global Credit UCO, Farm Credit UCO, Kilikia UCO

[68] Source: SME DNC

[69] *Estimate based on MFIs providing non-group loans*

[70] Excluding banks and MFIs that provide leasing services

5.2 Type of funding instruments

5.2.1 Loans

Loans are by far the most common form of funding instrument for SMEs. USD loans are dominant, with most banks reporting that well over 50% of their SME loan portfolios were in USD, and in some cases up to 80%. Collateral requirements are stringent, with an average loan-to-value ratio of 60% to 80% required by most banks. In addition, most banks require hard collateral, mostly real estate, although they can accept moveable property, cash or guarantees as well.

Interest rates range from a low of 11% on USD-denominated loans to medium-sized enterprises to 18% on AMD-denominated loans. MFIs charge slightly higher rates, up to 21%, often with an up-front fee of up to 6% as well as a monthly service fee. On average, interest rates on USD loans are up to 4% lower than those on AMD loans.

In general, financial institutions make working capital loans to SMEs for up to 36 months and fixed asset/term loans for up to five years, with anything beyond that an exception. Processing times for SME loans are reasonable, with most lenders reporting one to two weeks from application to disbursal. SME loan analysis is based primarily on financial soundness and purpose of the loan. Collateral quality is also important. Very few banks claim to be lending to start-ups, with some exceptions.

In general, financial institutions in Armenia project healthy increases of their SME loan portfolios this year. However, they do not believe that this growth is coming from growth in the number of SMEs, but instead from attracting SMEs in the regions that were previously ignored by the financial system or considered unbankable, or by stealing clients from other banks.

5.2.2 Leases

Leases represent a very small proportion of funding to SMEs, although one that is growing. ACBA Leasing, the main provider of leases, claims that the majority of lessees in the country qualify as SMEs, where the most interesting segment of the market is for leases between EUR 15,000 and EUR 75,000. Interest rates on leases range from 12% to 16%, slightly below bank loans, on average, and average maturities are three to four years. Total leases as of March 31, 2013 were EUR 16.7 million,[71] up from EUR 11.8 million a year earlier.

5.2.3 Letters of credit and trade finance guarantees

While banks offer guarantees and letters of credit to SMEs, these financial products are a very small proportion of SME funding. Most of the banks interviewed reported larger guarantee volumes to SMEs than letters of credit, with a total of EUR 13.5 million in guarantees outstanding to SMEs as of December 31, 2012, or 2.8% of those banks' MSME loan portfolios. LCs were much less common, with a nominal value of only EUR 2.6 million as of December 31, 2012 from the nine banks interviewed, about half a percent of their total MSME loan portfolios.

5.2.4 Risk capital

Risk capital providers play a miniscule role in the funding of SMEs, as only one investment has been made to date by a specialized private equity fund. With a new venture capital fund in the process of registration, a modest increase in risk capital investments can be expected in the next year.

[71] Source: ARKA News Agency

5.3 Characteristics of funding recipients

Sector: The trade sector is the most heavily banked sector across the board, as it is considered a low-risk sector by financial institutions. In general, trade enterprises have a simple business model, based on buying and selling, with very few unexpected situations, unlike the agriculture sector which is dependent on the weather and seasonality, and the production sector, where there are often unexpected costs that arise or force majeure cases. The services sector is another sector that is well banked, in general. Finally, many banks cited the food processing/production industry as being an attractive sector with high growth potential given its capacity to export.

Breakdown of loan portfolio by sector

Nine banks responding to BFC survey, proportion of MSME portfolio at Dec 31, 2012	
Sector	**%**
Trade	41.9
Manufacturing/production	19.1
Agriculture	11.3[73]
Services	10.3
Other	17.5
TOTAL	**100.0**

Total business loans of commercial banks, May 31, 2013	
Sector	**%**
Trade and services	41.3[72]
Industry and manufacturing	13.6
Agriculture	9.7
Construction and real estate	8.5
Other	26.9
TOTAL	**100.0**

Sources: BFC survey of nine financial institutions, CBA

Location: Most banks, with the exception of ACBA given its focus on the agriculture sector, reported that more than half of their SME loan portfolios, and in some cases up to 75%, were to SMEs in Yerevan, reflecting the geographically centralized economy.

Size: Banks reported MSME loan portfolios predominantly to enterprises internally classified as "small" (39.3% of MSME portfolios, on average, of the nine banks surveyed) followed closely by medium enterprises (36.6%). These figures are more pronounced when ACBA Bank is removed from the average, as it is highly skewed towards micro lending given its focus on the agriculture sector.

5.4 Institutional and regulatory issues

There are very few regulatory issues that affect the supply of SME financing. The most significant constraint cited by banks and other players is the lack of a transparent online system of registration of real estate transactions within the collateral registry. A more functional registry is vital for a commercial banking sector that relies so heavily on real estate as the primary form of collateral.[74] SMEs in rural areas are especially affected.

Likewise, while a single database for the registration of moveable properties was created by law, it remains ineffective given that it is not available electronically; information is only provided upon written request. In addition, the information provided is limited and the registration of pledge is not mandatory.[75] The creation of an online movable collateral registry would encourage more flexible collateral policies from lenders. By contrast, the credit information system is well developed,

[72] "Services" includes accommodation and food services and all financial services
[73] This figure is highly skewed by ACBA's large loan portfolio to the agriculture sector. Excluding ACBA, agriculture loans made up only 5.7% of total MSME loans as of December 31, 2012
[74] OECD Eastern Partner Countries SME Policy Index 2012
[75] OECD Eastern Partner Countries SME Policy Index 2012

including both public and private credit bureaus, with coverage of 46.6% of adults in Armenia in 2012, up from only 13.5% in 2007.[76]

The leasing sector suffers regulatory disadvantages in comparison with lending. For instance, SMEs that import equipment over USD 300,000 are allowed to defer the VAT for up to two years at customs. This benefit does not apply to leased equipment, however, creating a disincentive for customers to take out a lease versus a loan. In addition, the current legislation is not favorable to commercial real estate leasing activities.

5.5 Funding of intermediaries

5.5.1 Overview

With the exception of leasing companies, financial institutions serving SMEs have sufficient access to funding sources to meet demand. General funding sources for financial intermediaries are discussed in the Financial Sector section, including funding for leasing companies and private equity firms, most of which lack a specific SME-designation.

Local commercial banks and some MFIs are the only financial intermediaries with SME-specific lines of credit or loans. The providers of such SME-specific funding include the government and a range of development-oriented institutions, such as the EBRD, IFC, BlueOrchard, ResponsAbility and Incofin.

5.5.2 Government lending

All SME-specific government lending is channeled through the CBA and originates from various entities, the most common of which is the GAF. The GAF was established in 2001 and originally funded by a 40 year, EUR 16.8 million loan from KfW. This loan is now a EUR 32.0 million revolving fund, used to make local currency loans to five partner banks at a fixed rate of 9%, which is reviewed and adjusted semi-annually.[77] The money is in turn on-lent to SMEs in local currency for up to five years. The exchange rate risk is borne by the CBA.

Following the success of the KfW fund, the Government of Armenia and the World Bank provided subsequent funding, also channeled through the GAF, in the amounts of AMD 15.2 billion (EUR 28.3 million) and USD 50.0 million (EUR 37.9 million), respectively. Both funds have similar characteristics to KfW's, working with slightly different financial institutions, although the World Bank program is specifically a post-financing scheme, whereby the partner financial institutions make the SME loans first and receive refinancing from the World Bank, via the GAF. Finally, the GAF administers AMD 60.5 billion (EUR 112.6 million) of a larger loan from the Russian Federation, for "economic stabilization" purposes, including loans to financial institutions for on-lending in local currency to SMEs. As per CBA policy, the GAF will eventually pass the administrative function of these funds to the European Fund for Southeast Europe, discussed in the next section.

Finally, the CBA channels some loans through other sources besides the GAF, such as AMD 7.5 billion (EUR 14.0 million) in funds from the Russian Federation that are to be on-lent to the agriculture sector in local currency. Loans are made at an interest rate of 14%, with 4% subsidized by the government. While up to six banks have access to this scheme, ACBA Bank claims that it is accessing about 95% of the total.

[76] http://www.tradingeconomics.com/armenia/private-credit-bureau-coverage-percent-of-adults-wb-data.html
[77] For instance, one bank reported paying 7-7.8% as of December 31, 2012

5.5.3 Development finance and commercial lending

IFI and DFI funding is plentiful in Armenia, with most banks involved in SME lending having at least one line of credit from such sources. The most common lenders listed by the banks include the IFC, EBRD, KfW (only through the GAF), World Bank (only through the GAF), ADB, BSTDB, FMO, Blue Orchard, Incofin, WorldBusiness Capital and ResponsAbility/Planet Finance.

Another common source of funding is the European Fund for Southeast Europe (EFSE), funded by several IFIs, private institutional investors and the CBA, which created the local currency window in 2010. EFSE has a current portfolio of EUR 40.0 million in Armenia, lending to SMEs through five local financial institutions. As mentioned in the previous section, EFSE is poised to slowly take over the administrative function of other local currency funds, supported by the CBA.

Loans from IFIs and DFIs are made at both fixed and floating rates. Fixed rates on USD denominated loans cost, on average, from 4% to 8%. AMD-denominated loans are more expensive, at 10% to 15%. Floating rates are made at LIBOR plus 4% to 5%. The typical maturity on borrowings is five years, and up to ten in rare cases.

Overall banks cited a need for more local currency financing, and in some cases a need for longer term local currency financing (> five years), especially at affordable prices.

5.6 Supply estimate

The supply of direct SME financing from licensed institutions in Armenia at the end of 2012 is estimated at approximately EUR 817.1 million, including estimates of loans from banks, risk capital and leases. This is equivalent to 10.9% of 2012 GDP and 25.3% of the outstanding loans of all financial institutions in Armenia at year-end 2012. The calculation is made by:

1. Estimating the proportion of SME loans in the total loan portfolios of commercial banks, based on a survey of nine banks
2. Multiplying those proportions by the total outstanding loan portfolios of all lenders
3. Estimating the risk capital invested as of YE12
4. Estimating the leases extended to SMEs as of YE12

Estimate of SME loan supply at YE 2012

	Value
A. SME loans to total loans (%)	25.8
B. Total loans (EUR m)	3,101
C. SME loan supply estimate (=A*B) (EUR m)	800.2

Total SME financing supply at YE 2012

	EUR m
E. SME loan supply estimate (from above)	800.2
F. Estimated risk capital	2.3
G. Estimated leases	14.6
H. SME loan supply estimate (=E+F+G)	817.1

Source: Bank surveys, audited financials of FIs, BFC estimates

This estimate may somewhat overstate the supply of lending to SMEs, since the nine banks which responded to the survey request are among the country's most active SME lenders. In addition, survey respondents apply differing definitions of SMEs, which introduces another element of inaccuracy in the estimates. The model assumes that 100% of leases are to SMEs, based on anecdotal information from ACBA Leasing. This may be slightly overstated, although there is no data available to make a more informed approximation. SME portfolios of MFIs were not included, since the volume of SME lending by MFIs could not be measured accurately, but is assumed to be very low.

6. GAPS IN PRIVATE SECTOR FINANCING

Conclusion:
The largest identifiable gap in financing is for long term local currency funds to SMEs, especially at affordable prices. Latent unmet demand for other financial products, especially leases and risk capital, is also pervasive.

Key findings:
- *Strict collateral requirements make loans unattainable to many SMEs*
- *SMEs in rural areas and engaging in agriculture remain under-banked*
- *Insufficient financial literacy in Armenia means that SMEs are not fully aware of the benefits of non-loan products such as leases, risk capital and trade finance*

6.1 Gaps by instrument

The SME funding gap in Armenia is most evident for affordable local currency loans, especially at a longer tenor, as commercial banks themselves do not have access to such funds to on-lend. The introduction of a pension system in 2014 may help to address this gap. The funding gap is also a result of banks' high collateral requirements, well over 100% coverage, with an overwhelming focus on real estate. Such requirements often make loans unattainable for SMEs, especially smaller ones which lack such resources.

Meanwhile, demand for leasing products and risk capital remains latent, as SME players lack familiarity with these products and with the companies that provide them. Through public outreach, leasing companies may be able to generate additional demand. The consistent presence of risk capital providers is almost nil, with only one deal having been made to date. The gap for other products, such as LCs and trade guarantees, is very low, based on anecdotal information, mainly as a result of low demand.

Based on rough estimates for year-end 2012, demand for SME loans is EUR 944 million, while supply of loans to SMEs is EUR 800 million.

6.2 Gaps by type of SME

There is a large segment of SMEs deemed "unbankable" by banks, especially those which lack the appropriate collateral to meet the banks' requirements. Such entities are more likely to be in rural areas, engaged in agriculture, and classified as either micro or small enterprises.

Financial sector players generally cited a communication gap between themselves and SMEs, whereby SMEs are not properly able to present their company or their funding needs. For example, according to some interviewees, their financial statements are often not in order or they lack a clear business plan. This communication gap translates directly into unmet demand for financing.

6.3 Gaps in funding of intermediaries

As discussed earlier, commercial banks are only constrained by lack of access to long term local currency funds, especially at affordable prices. Otherwise, foreign currency funds are plentiful for commercial banks and the larger MFIs alike. Leasing companies, on the other hand, are constrained by lack of funds.

6.4 Potential and capability of DFIs to fill gaps

IFI support for the SME sector has primarily been through loans to financial institutions to be on-lent to SMEs, with very little variation from this model. More and more DFIs are offering loans in local currency, or lending to the government with the CBA taking on the currency risk. It is a common model to complement the IFIs' investments with technical assistance to either financial institutions or SMEs themselves, often through partner financial institutions.

European Bank for Reconstruction and Development (EBRD): The EBRD supports the SME sector primarily through term loans of up to five years to 12 partner financial institutions to be on-lent to SMEs. The EBRD has been a leader in local currency loans to financial institutions, extending nearly EUR 60 million in AMD-denominated loans to date. As of January 31, 2012, the EBRD had an outstanding portfolio of EUR 81.0 million in loans to financial institutions. The EBRD also offers a medium sized co-financing facility with four partner banks, through which it contributes up to 50% of the financing for a direct loan to SMEs. Average loan sizes under this facility are EUR 750,000 to EUR 1.2 million and total direct lending is about EUR 18.7 million. The majority of this facility was disbursed pre-2011 as banks are currently in a period of high liquidity. While the EBRD used to offer equity to midsized companies, with investments in about six companies at the peak, it is now doing more mezzanine financing. The EBRD also has equity investments in four banks: Ararat Bank (25% ownership), Byblos Bank (25%), Armeconombank (25%) and ProCredit Bank (14.4%), totaling EUR 12.0 million invested as of January 31, 2012. Going forward the EBRD will continue to lend to its partner financial institutions and will continue to offer direct loans to SMEs, committing EUR 22.0 million to EUR 30 million to be invested in up to seven companies.

KfW: Like the EBRD, KfW is working through local financial institutions, providing term loans at subsidized interest rates, guaranteed by the Armenian government, to be on-lent to SMEs, with the goal of promoting financial sector development. In 1999, KfW made a loan of EUR 16.8 million to the government, managed by the GAF and on-lent in AMD to five local financial institutions. This 40 year loan has almost doubled to reach EUR 32.0 million. KfW previously had a EUR 5.0 million credit guarantee fund that provided a guarantee on loans from Commerzbank to five Armenian banks. KfW also owns 12.9% of ProCredit Bank. Going forward KfW will focus on loans to the agriculture sector, also through government guaranteed loans to financial institutions.

IFC: The IFC primarily lends to financial institutions for on-lending to SMEs. The IFC currently has active loans of over EUR 86 million to eight financial institutions, including ACBA Leasing and seven commercial banks. The IFC also holds a 9.3% equity stake in Inecobank. As of December 31, 2012, the IFC's total portfolio in Armenia stood at EUR 103.4 million including debt and equity investments in the financial markets, manufacturing, and mining sectors.

Asian Development Bank: To date, the ADB has made loans to four commercial banks, totaling EUR 48.6 million, for on-lending to SMEs. The ADB's newest initiative is to support women's entrepreneurship through a policy-based loan to the government to strengthen the SME DNC and its support for women entrepreneurs and MSMEs. As part of the same initiative, the ADB will make loans to financial intermediaries to provide local currency loans to MSMEs, of which at least 50% must be women's MSMEs. TA will accompany these loans to support the SME DNC, GAF and the financial intermediaries. The total project commitment will be EUR 34.1 million.

United States Agency for International Development (USAID): USAID is a technical assistance provider, supporting the SME sector through its Finance for Economic Development (FED) project (EUR 2.8 million over four years), which promotes the capacity of Armenian financial institutions to support enterprise development, assists in policy/regulatory reforms to improve the stability of the financial system and increases access to finance for SMEs. The Enterprise Development and Market Competitiveness (EDMC) project (EUR 13.1 million, five years) promotes growth in individual value chains that have export potential.

DEG: The German development finance institution DEG has made loans to financial institutions in Armenia for on-lending to SMEs, including a USD 20.0 million (EUR 15.2 million) loan to Ameriabank and a USD 10.0 million (EUR 7.6 million) loan to Inecobank. DEG is also a 12.6% shareholder in Inecobank.

FMO: Dutch development agency FMO makes loans to financial institutions for on-lending to SMEs, such as a loan made in partnership with the IFC to AEB for USD 10.0 million (EUR 7.6 million). In addition, FMO is a founding shareholder of EFSE along with the EBRD, IFC and KfW, among others.

ANNEX 1: MACROECONOMIC INDICATORS

Indicator	2012	2011	2010	2009	2008
GDP (nominal, EUR millions)	7,496.6	7,572.3	7,191.4	5,793.9	8,381.9
Population (millions)	n/a	3,274.3	3,262.6	3,249.5	3,238.4
GDP (nominal) per capita (EUR)	2,479.0	2,317.6	2,209.1	1,787.0	2,592.6
GDP (PPP) per capita (EUR)	5,028.5	4,687.0	4,282.5	3,820.8	4,472.4
Real GDP growth rate (%)	7.2	4.7	2.2	(14.1)	6.8
Inflation rate (CPI)	2.6	7.7	7.3	3.5	
Exchange rate (EUR, end of period)	533.3	498.7	481.2	542.2	435.0
Change in exchange rate (%)	6.9	3.6	(11.3)	24.7	(2.7)
Unemployment rate (official)	n/a	6.2	7.0	6.9	6.3
Poverty rate (World Bank)	n/a	35.0	35.8	34.1	27.6
Current account balance (% of GDP)	(10.7)	(11.4)	(14.4)	(16.5)	(11.6)
Trade balance (% of GDP)	(28.7)	(21.2)	(21.4)	(25.0)	n/a
Capital account balance (% of GDP)	1.0	1.0	1.1	1.1	1.3
FDI (% of GDP)	3.1	4.4	6.1	8.4	n/a
Central bank reserves (% of GDP)	18.2	19.7	19.6	24.1	11.8
Public debt (% of GDP)	39.5	36.4	34.7	35.7	n/a
Fiscal balance (% of GDP)	(2.2)	(2.8)	(4.6)	(7.9)	n/a

Source: IMF, CBA

Main origins of GDP (% of total)

Sector/activity	2011
Agriculture	20.2
Industry	16.7
Retail Trade	13.4
Construction	12.8
Financial services & real estate	6.3

Source: EIU

ANNEX 2: FINANCIAL SECTOR INDICATORS

Banking sector indicators

Indicator	2012	2011	2010	2009	2008
STRUCTURE OF THE BANKING SECTOR					
Number of banks by type:					
Commercial Bank	21	21	20	21	21
Development Bank	1	1	1	1	1
Total banks	22	22	21	22	22
Number of state-owned banks	0	0	0	0	0
Assets of SOBs to total bank assets	n/a	n/a	n/a	n/a	n/a
4-bank concentration ratio	39.3	37.6	n/a	n/a	n/a
Bank branches per 100,000 population	18.9	18.7	17.4	n/a	n/a
FINANCIAL INDICATORS (EUR millions)					
Total assets	4,486	4,144	3,243	2,445	2,353
Total gross loans	3,101	2,427	1,847	1,297	1,418
Total net loans	2,840	2,375	1,810	1,263	1,390
Total deposits	2,336	1,873	1,399	1,156	1,033
Total equity	757	714	663	513	541
Total regulatory capital	738	714	663	513	542
Total net profit	75.3	66.5	62.8	15.5	61.8
FINANCIAL RATIOS (%)					
Capital adequacy:					
Tier 1 CAR	15.2	n/a	n/a	n/a	n/a
Total CAR	16.8	18.3	22.2	28.4	27.5
Equity to total assets	16.9	17.2	20.4	21.0	23.0
Liquidity:					
Loans to deposits	132.7	129.6	132.0	112.2	137.2
Growth rate of deposits	33.3	38.8	7.4	39.5	12.8
Regulatory liquidity ratio	126.1	120.8	131.5	140.8	103.1
Cash and equivalents to assets	25.6	27.9	29.5	34.4	23.8
Profitability:					
Return on average assets	2.5	1.8	2.1	0.7	3.0
Return on average equity	14.7	9.8	10.1	3.3	13.2
Net interest margin	5.3	5.2	5.4	5.3	6.7
Asset quality:					
Growth rate of loan portfolio	36.6	36.2	26.3	14.0	50.9
NPL ratio[78]	3.7	3.4	3.1	4.8	4.4
Others:					
Growth rate of total assets	15.8	32.4	17.7	29.5	33.9
Bank assets to fin. sector assets (%)	90.2	91.1	90.9	92.0	91.9

Source: CBA

[78] As per the CBA's definition of loans classified as watch + substandard + doubtful; as per the IMF's definition of loans classified as substandard + doubtful + loss, NPLs were 6.1% and 5.3% in 2012 and 2011, respectively

NBCI sector indicators

Indicator (EUR millions)	Q2 2013	2012	2011	2010	2009
Number of NBCIs (EUR millions)	33	32	32	31	27
Total assets of NBCIs (EUR millions)	355.6	316.0	248.3	181.2	139.8
Total capital (EUR millions)	135.9	117.9	93.9	74.7	48.4
Net profit (EUR millions)	12.0[79]	8.7	5.5	8.8	4.8
Total capital adequacy ratio (%)	36.1	n/a	n/a	n/a	n/a
Return on equity (%)	9.5	10.5	17.5	14.0	11.8
Return on assets (%)	3.8	3.9	6.8	5.0	3.7

Source: ARKA, CBA

[79] Annualized

ANNEX 3: PRUDENTIAL RATIOS FOR BANKS

Ratio	Criteria
Capital adequacy (as a % of risk-weighted assets)	≥ 12%
Capital stock (in Armenian Dram/AMD)	
Statutory fund	≥ 50 million
Total capital	≥ 5 billion
Credit risk concentration (as a % of total capital; refers to funded and off-balance sheet exposure)	
Single borrower	≤ 20%
All major borrowers[80]	≤ 500%
Single related party	≤ 5%
All related parties	≤ 20%
Liquidity[81]	
Highly liquid assets (as a % of total assets), general liquidity	≥ 15%
Highly liquid assets (as a % of demand liabilities), current liquidity	≥ 60%
Reserve requirement (as a % of local currency deposits)	≥ 8%
Reserve requirement (as a % of foreign currency deposits, to be held in local currency)	≥ 12%
Currency risk exposure (as a % of total capital)	
Foreign currency position[82]	≤ 10%
Any individual currency[83]	≤ 7%

[80] A major borrower is a party on which the exposure exceeds 5% of total capital of the bank.
[81] Liquid assets include correspondent accounts and required reserves and deposits with the CBA (Art. 34.2)
[82] Foreign currency position shall mean the difference between foreign currency assets and liabilities, as well as assets and liabilities in Armenian drams carrying foreign currency risk, calculated according to Rule 56.2 of Regulation 2. From August 1, 2012, the foreign currency position equals the gross foreign currency position, which is calculated as a grand total of absolute values of foreign currency different positions.
[83] The position in any particular foreign currency shall be calculated by type of foreign currency both including and excluding the financial derivatives expressed in the currency in question and reviewed by two foreign currency groups. Each foreign currency position equals the open position in each foreign currency, which shall be the difference between assets and liabilities in a particular foreign currency.

ANNEX 4: KEY BANKING REGULATIONS

Category	Brief description
Financial reporting standards	Dual reporting, under IFRS and CBA regulations, is required and enforced by CBA supervisors. Armenian banks have been required to meet IFRS standards since 2009.[84]
Corporate governance standards	There is no requirement for there to be an independent director on the supervisory board of CJSC banks, although OJSC banks require at least one. There is no maximum limit to length of service for board members. Board size must be between five and 15 members (inclusively), the average across the banking sector being seven to eight as estimated by the CBA. Board meetings are to be held at a minimum once every two months and the CEO must provide performance reports to the board at least once a quarter. The internal audit function must be supervised by the board and be independent from management. The CBA vets all prospective board members and senior management personnel for suitability, and requires that there is a clear division between the board chairman and CEO.
Ownership restrictions	None
Capital adequacy standards	Banks are subject to Basel II requirements for the purpose of capital adequacy computation. Risk weighted assets are calculated per the standardized approaches for credit and market risks and the basic indicator approach for operational risk. Risk weighting for FX assets is higher than for dram-denominated assets to discourage further dollarization of balance sheets, though the CBA retains the flexibility to loosen this requirement in a stressed scenario. Full convergence to Basel III requirements is expected by 2016.
Minimum capital requirements	The minimum statutory capital for a bank is AMD 50.0 million (EUR 92,700), to be replenished in AMD only, and the minimum total capital for a bank is AMD 5.0 billion (EUR 9.3 billion)
Interest rate caps or floors	None
Definition of NPL	NPLs are defined according to classification by both quantitative and qualitative criteria. All loans past due more than 90 days are deemed to be non-performing. 'Loss' loans, which incorporate all loans overdue more than 270 days, are fully provisioned and are taken off the balance sheet, therefore do not feature as part of the CBA's calculation of NPLs.
Loan write-off policy	n/a
Loan classification and provisioning policy	Loans are divided into five categories for loan provisioning purposes, with all performing loans requiring a 1% general provision. The other four categories require provisions ranging from 10% to 100%, with slightly higher provisioning percentages for FX denominated loans than local currency, with the exception of the "loss" category, which requires

[84] PriceWaterhouseCooper. *Doing Business in Armenia (2011-12).* http://www.pwc.com/am/en/assets/pdf/AM_Doing_Business_Guide_2011-2012.pdf.

	a 100% provision for any currency.
Deposit insurance	The Deposit Guarantee Fund of Armenia, established by the CBA, covers AMD-denominated deposits of up to AMD 4.0 million (EUR 7,400) and FX-denominated deposits of AMD 2.0 million (EUR 3,700).
Reserve requirements	The minimum reserve requirement with the CBA is 8% for AMD resources and 12% for FX resources (although reserves must be placed in AMD).
Foreign currency operations	The maximum ratio of foreign currency position to total capital is 10%. By types of foreign currencies the maximum ratio of each foreign currency to total capital is 7%, as per the previous table.
Related party transactions	Exposure to related parties is limited, as per the previous table.

ANNEX 5: LIST OF LARGEST FINANCIAL INSTITUTIONS

List of banks

	Name	Ownership	Total assets (EUR millions, Dec. 2012)
1	ACBA Credit Agricole Bank	CREDIT AGRICOLE S.A (15.6%); Mutual Regional Village Associations from various marzes in Armenia (71%)	464.0
2	AmeriaBank	Ameria Group (CY) Limited (100%)	459.5
3	HSBC Bank Armenia	HSBC Europe BV (70%)	396.6
4	VTB Bank Armenia	"VTB" OJSC (100%)	396.2
5	Ardshininvestbank	"Center for Business Investments "LLC (97.2%)	372.3
6	Armbusinessbank	Chrystie Management Inc. (100%)	350.2
7	UniBank	Ripatonso Holdings Limited (75.4%); Two individuals (24.6%)	259.5
8	Converse Bank Corp	"Advanced Global Investments" LLC (95%)	217.2
9	Ararat Bank	"Flash" Ltd. (69%); EBRD (25%)	213.2
10	Inecobank	DEG (12.6%); IFC (9.3%); two individuals (65.5%)	206.3

Source: KPMG, "Armenian Banking Sector Overview" May 2013

List of top MFIs

	Name	Ownership	Total assets (EUR millions, Dec. 2012)
1	FINCA Armenia	FINCA International (66.3%); IFC (15.0%), KfW (7.2%), FMO (6.7%), other institutional investors (4.8%)	97.0
2	Aregak	United Methodist Committee on Relief (UMCOR) (100%)	24.2
3	Kamurj	Microenterprise Development Charitable Fund (100%)	14.1
4	SEF Armenia	Vision Fund International (100%)	13.4

Source: Audit reports for individual MFIs

ANNEX 6: PROSPECTS OF THE LARGE ENTERPRISE SECTOR

As of YE 2009 large enterprises made up only 2.3% of total registered companies in Armenia, a figure which has remained mostly unchanged over the past four years. At the same point in time, they made up 57.5% of total GDP, 57.8% of employed persons, 82.3% of total exports and 73.8% of total imports. Large enterprises also attracted 92.2% of total foreign investment in 2009. As a percent of total enterprises, large companies had the largest share in the transport & communication sector, accounting for 12.7% of registered businesses, followed by construction at 10.4%.

Most banks appear to have traditionally focused on corporate and retail lending, with Ameriabank, especially, dominating the corporate lending sector. Banks have become more cautious in lending to the corporate sector in the past year or so, as they have seen increased NPLs in that sector, largely due to many publicly known problems with large Armenian conglomerates, many of which are owned by oligarchs. Example companies include heavily indebted airline company Armavia, supermarket chain Star Supermarket and chemical company Nairit. This is likely to slow down corporate lending in the near future.

Corporate loans went to the trade, food & beverage, manufacturing, transportation, construction and real estate sectors. Corporate loans are typically not extended for more than seven years (five is more typical) and hold a minimum interest rate of 14% (AMD-denominated), 13% (USD-denominated) and 12% (EUR-denominated).[85] It is also standard for a bank to charge a disbursement fee of 0.3% to over 1.0%. A one year grace period is not unusual.

Some IFIs, such as the IFC, EBRD and ADB, make loans to support the corporate sector. In June 2013 the IFC approved a USD 10.0 million (EUR 7.3 million) loan to support the construction of an energy efficient green office complex in Yerevan. The EBRD, alongside the ADB, provided a EUR 19 million loan to International Energy Corporation (IEC) to finance the rehabilitation of seven hydropower plants of the Sevan-Hrazdan Cascade, northeast of Yerevan.

[85] Based on Ameriabank's rates. VTB's minimums are 12% (AMD), 10% (USD) and 11% (EUR).

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