THE FINANCIAL COMPETENCY MATRIX FOR ADULTS
A POLICY FRAMEWORK
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ACKNOWLEDGMENTS

The Financial Competency Matrix for Adults is a policy framework developed by AFI’s Eastern Europe & Central Asia Policy Initiative (ECAPi) and the Consumer Empowerment and Market Conduct (CEMC) Working Group.

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This policy framework builds on discussions with AFI member institutions of the CEMC Working Group and ECAPi, and with international experts from the Eurasian Economic Community (EurAsEC).

Special thanks to those who provided insights, guidance and comments during the initial development of competency matrix in 2014, and at revision workshops held at different conferences.

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OVERVIEW

This publication defines the core competencies every adult needs to make informed financial decisions. The Financial Competency Matrix for Adults provides a framework to support effective policymaking, monitoring and assessment. Applying the same definition of financial capability used by international organizations and academia, the competencies in the matrix are grouped into four key components (knowledge, skills, attitude and behavior) and seven thematic areas of financial education (economy, budgeting, saving and planning, debt management, shopping around, rights protection and security).

This policy framework, which can be applied in countries worldwide, is based on the Financial Capability Barometer developed by the Central Bank of Armenia (CBA) and funded by AFI in 2017, with contributions from the Consumer Empowerment and Market Conduct (CEMC) Working Group through technical feedback.

The publication identifies various areas in which policymakers might apply this tool.
BACKGROUND

In 2014, the CBA developed the Financial Competency Matrix for Adults. This matrix was based on Armenia’s National Strategy for Financial Education (NSFE)¹ and the results of two financial capability assessments conducted by the OECD (2010) and The World Bank (2012). These studies revealed relatively low levels of financial literacy in Armenia, especially in the areas of saving, budgeting and debt management (Atkinson and Messy 2012, Kempson et. al. 2013).

The Financial Competency Matrix for Adults has played an important role in the development and measurement of financial education policies in Armenia. For example, it has been used by the CBA to develop financial education materials for different target groups, including youth, women and villagers.

In 2017 a new framework for measuring financial capability was developed by the CBA in cooperation with the Alliance for Financial Inclusion (AFI) based on the original matrix. This framework not only allows policymakers to set policy priorities and monitor progress effectively, it also helps to design targeted interventions and communicate with public and stakeholders using a simple scoring system (Pokrikyan et al. 2017).

Since financial capability is a universal concept, sharing the range of competencies captured in the Financial Competency Matrix for Adults may help to improve financial education policies globally. The matrix has been reviewed and revised by AFI members and international experts at various global forums, including an international workshop hosted by the Eurasian Economic Community (EurAsEC), “Financial Consumer Protection and Financial Literacy” (2014); AFI Consumer Empowerment and Market Conduct (CEMC) and Financial Inclusion Data (FID) Working Group meetings (2018); and the AFI Joint Learning Program, “Consumer Protection: Enhanced Market Conduct Regulation and Supervision for Financial Inclusion” (2018).

This document was developed by the CBA in response to the needs of the AFI network, and builds on feedback from AFI and EurAsEC member countries and international experts.

FINANCIAL COMPETENCY FRAMEWORKS: INTERNATIONAL PRACTICES

Financial competency frameworks have been developed by many institutions to support policy objectives related to financial education. The OECD (2016), mapped existing frameworks, emphasizing the importance and relevance of these competencies in developing national financial education strategies, improving the design of financial education interventions, creating measurement tools and evaluating policy gaps.

The components and themes of financial competency frameworks are largely harmonized, but there are slight differences in focus. The most common components are knowledge, skills, attitude and behavior. Themes are consistent across countries and cover aspects of the financial system such as budget planning and management, saving, debt and credit, and rights and responsibilities. Some countries do not separate components (e.g. Czech Republic) and themes (e.g. Australia) in their frameworks. Some focus on topics unique to their culture and financial system, or on specific aspects of market conduct regulation and consumer protection.

Most financial competency frameworks target adults, but separate frameworks have been developed specifically for youth. Depending on the financial education interventions for youth and adults, the OECD and some countries have developed separate frameworks. Interestingly, in countries like Armenia, a framework for adults was developed first and then adapted to different age groups, while in other countries the youth framework took precedence.

² “Financial capability” and “financial literacy” are used interchangeably in this document.
The Financial Competency Matrix for Adults uses common definitions of financial capability developed by international organizations. These definitions do not have any major conceptual differences. Armenia’s National Strategy for Financial Education (NSFE) defines a financially capable person as one who has the knowledge, abilities, skills and culture that have them the opportunity to be informed, make responsible decisions about personal finance and take the right actions according to the situation (2014). This definition of financial capability corresponds with the knowledge, skills, attitude and behavior an individual demonstrates when making decisions about their personal finances.

The Financial Competency Matrix for Adults is divided into four components and seven financial education topics. Each of the four columns of the matrix represents a different competency:

- **Knowledge**
- **Skills**
- **Attitude**
- **Behavior**

Each row of the matrix represents one of the competencies below:

- **a. Economy** - national economy, inflation, exchange rate, financial system, financial institutions, etc.
- **b. Budgeting** - income, expenditure, managing personal finances and using financial services, such as bank accounts, payment cards, insurance, etc.
- **c. Saving and planning** - formal and informal ways of saving, short-term and long-term planning, financial services and investment, deposits, bonds, shares, etc.
- **d. Debt management** - formal and informal ways of borrowing, credit, credit history, collateral, etc.
- **e. Shopping around** - characteristics of financial services, comparison and evaluation based on different factors, etc.
- **f. Rights protection** - consumer protection cycle, rights and responsibilities depending on financial services, institutions, etc.
- **g. Security** - types of financial frauds and scams, prevention, control, etc.

The cross-section of each topic and component in the Financial Competency Matrix represent the core competencies. These competencies are important in terms of designing and implementing targeted financial education policies. However, there is no expectation that all adults in a country should have all the competencies listed. Depending on various factors, such as personal needs, culture and social and economic context, the competencies required to improve the financial well-being of an individual might be different. Thus, different groups of individuals will require different sets of competencies.
The following matrix is a comprehensive framework of financial competencies for adults, covering four components and seven themes.

<table>
<thead>
<tr>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>ATTITUDE</th>
<th>BEHAVIOR</th>
</tr>
</thead>
</table>
| **ECONOMY** | > Know what kinds of organizations provide financial services.  
> Be familiar with different types of financial services.  
> Understand basic macroeconomic concepts (e.g. inflation, exchange rate, interest rates, taxes).  
> Understand the role of financial authorities in the country (e.g. central bank, deposit guarantee fund). | > Be able to match different types of financial services with the organization that provides the service.  
> Be able to evaluate the impact of basic macroeconomic concepts on personal finance. | > Trust the financial system.  
> Appreciate the importance of being aware of the financial system and economy. | > Use different types of financial services.  
> Follow economic news, track changes in basic macroeconomic indicators and ask questions. |
| **BUDGETING** | > Understand that a budget is the combination of income and expenses.  
> Know the different types of income and differentiate them from cash inflows.  
> Know the different types of expenses and differentiate them from cash outflows.  
> Distinguish between regular and irregular income and expenses.  
> Distinguish between a bank account and payment card, and the benefits and risks associated with using these financial services.  
> Be aware of different risks that may affect a personal and/or family budget.  
> Understand insurance and outline the benefits and risks associated with using different types of insurance services. | > Be able to balance a personal and/or family budget by saving or managing debts.  
> Be able to make sound financial decisions based on budget flows.  
> Be able to set priorities for expenses based on needs and wants.  
> Be able to monitor and control a budget over time.  
> Be able to use a bank account and payment cards for different financial transactions.  
> Be able to analyze bank statements.  
> Be able to manage different risks and take appropriate actions.  
> Be able to select relevant insurance services based on risks. | > Appreciate the importance of budgeting for effective financial decision making.  
> Appreciate regular tracking and controlling of income and expenses.  
> Appreciate basic financial services, such as bank accounts, payment cards and insurance services, for effectively managing personal finance and associated risks. | > Budget effectively and keep track of it by regularly writing down income and expenses and using checks, bank statements, etc.  
> Make effective financial decisions based on regular and irregular budget flows.  
> Actively use bank account and payment cards.  
> Use at least one insurance service. |
## SAVING AND PLANNING

<table>
<thead>
<tr>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>ATTITUDE</th>
<th>BEHAVIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Understand the concept of time value of money (TVM).</td>
<td>&gt; Be able to choose a financial product to invest in (e.g. deposit, securities, pension funds) depending on short-term and long-term saving objectives.</td>
<td>&gt; Be inclined to save regularly by investing in formal financial services.</td>
<td>&gt; Save regularly based on saving goals defined in advance (10 percent of monthly income).</td>
</tr>
<tr>
<td>&gt; Understand that saving helps to achieve various goals in life.</td>
<td>&gt; Be able to diversify investments based on risks and short-term and long-term saving objectives.</td>
<td>&gt; Appreciate the importance of diversification.</td>
<td>&gt; Invest savings by using formal financial services.</td>
</tr>
<tr>
<td>&gt; Understand that savings can be invested to earn additional income.</td>
<td>&gt; Be able to track and control investments (e.g. check pension account statements).</td>
<td>&gt; Appreciate the role of long-term thinking.</td>
<td>&gt; Keep track of short-term and long-term investments.</td>
</tr>
<tr>
<td>&gt; Know that there are informal and formal ways of saving/investing (e.g. deposit, securities, pension funds).</td>
<td>&gt; Make different calculations to support financial decisions by using simple and compound interest.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Know that there might be additional costs associated with formal ways of saving.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Distinguish between nominal rate and annual percentage yield (APY).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Understand what diversification means.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Know the concept of simple and compound interest.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Understand the relationship between risk and return.</td>
<td></td>
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</tr>
</tbody>
</table>

## DEBT MANAGEMENT

<table>
<thead>
<tr>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>ATTITUDE</th>
<th>BEHAVIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Understand that taking on debt helps to achieve various goals in life.</td>
<td>&gt; Be able to identify the appropriate amount of money to borrow.</td>
<td>&gt; Appreciate the importance of responsible borrowing.</td>
<td>&gt; Take on debt based on one’s budget and needs.</td>
</tr>
<tr>
<td>&gt; Know informal and formal sources of borrowing (e.g. consumer loan, mortgage).</td>
<td>&gt; Be able to identify one’s ability to pay back debt based on budget flows (up to 40 percent of monthly income).</td>
<td>&gt; Be inclined to borrow from formal sources.</td>
<td>&gt; Borrow from formal sources.</td>
</tr>
<tr>
<td>&gt; Distinguish between a nominal rate and annual percentage rate of charge (APRC).</td>
<td>&gt; Be able to choose which financial product to borrow (e.g. consumer loan, mortgage) depending on needs.</td>
<td>&gt; Be cautious about borrowing to refinance existing debts.</td>
<td>&gt; Use a debt repayment schedule and pay back debts on time.</td>
</tr>
<tr>
<td>&gt; Know the role of collateral and the different types.</td>
<td>&gt; Be able to track and control debts to pay them back on time.</td>
<td>&gt; Appreciate monitoring and paying back debt on time through proper planning.</td>
<td></td>
</tr>
<tr>
<td>KNOWLEDGE</td>
<td>SKILLS</td>
<td>ATTITUDE</td>
<td>BEHAVIOR</td>
</tr>
<tr>
<td>-----------</td>
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<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>SHOPPING AROUND</strong></td>
<td>&gt; Know different information sources for financial services and their terms and conditions.</td>
<td>&gt; Be able to obtain necessary information from different sources in a short period.</td>
<td>&gt; Collect and compare the required information before choosing financial services.</td>
</tr>
<tr>
<td></td>
<td>&gt; Know the key information for each financial service and what is needed to compare offers (e.g. APRC in the case of consumer loans).</td>
<td>&gt; Be able to ask the right questions and get the necessary information.</td>
<td>&gt; Follow and use different official and professional information sources.</td>
</tr>
<tr>
<td></td>
<td>&gt; Be aware of information disclosure regulation in a country.</td>
<td>&gt; Be able to compare financial services before making decisions.</td>
<td>&gt; Request consultation if needed.</td>
</tr>
<tr>
<td><strong>RIGHTS PROTECTION</strong></td>
<td>&gt; Know the rights and responsibilities associated with using financial services.</td>
<td>&gt; Be able to differentiate between individual rights and responsibilities and those of the organizations providing financial services.</td>
<td>&gt; Read and understand terms and conditions outlined in contracts before signing.</td>
</tr>
<tr>
<td></td>
<td>&gt; Know which official authorities deal with consumer complaints.</td>
<td>&gt; Be able to identify the authority responsible for different issues.</td>
<td>&gt; Apply to official/legal authorities if an issue arises.</td>
</tr>
<tr>
<td></td>
<td>&gt; Know the formal procedure for making a complaint.</td>
<td>&gt; Be able to present arguments and make the complaint according to the formal procedure.</td>
<td></td>
</tr>
<tr>
<td><strong>SECURITY</strong></td>
<td>&gt; Know to be careful when discussing personal finance with someone else.</td>
<td>&gt; Be able to keep personal information secure and use financial services responsibly (e.g. online shopping).</td>
<td>&gt; Protect against financial frauds and scams and apply to official/legal authorities in case of an issue.</td>
</tr>
<tr>
<td></td>
<td>&gt; Be aware of different financial frauds and scams and avoid them.</td>
<td>&gt; Be able to identify attempted financial frauds and scams.</td>
<td>&gt; Reject attractive suspicious financial offers from unknown sources.</td>
</tr>
<tr>
<td></td>
<td>&gt; Know which official authorities deal with financial security issues.</td>
<td>&gt; Be cautious of suspicious financial offers and organizations.</td>
<td>&gt; Follow the news related to financial frauds and scams.</td>
</tr>
</tbody>
</table>
POLICY MONITORING

The Financial Competency Matrix for Adults were used as a key tool for assessing and monitoring Armenia’s NSFE. In 2014, the Financial Capability Barometer baseline study showed that only 44 percent of adults in Armenia, on average, demonstrate competencies across the seven topics and four components of the matrix. Table 1 shows the scoring system of the Financial Capability Barometer (Pokrikyan et. al. 2017).

For example, if knowledge about saving and planning is only 27 percent, then adults in Armenia likely have issues understanding the time value of money, formal and informal ways of saving, investments, simple and compound interest and other financial topics. Similarly, skills related to security are 13 percent, while attitude and behavior are 75 percent and 67 percent, respectively. This indicates that although people have issues with privacy and are not able to identify attempted financial frauds and scams, they are still cautious and reject attractive suspicious financial offers from unknown sources.

SURVEY DESIGN

The Financial Competency Matrix is also valuable when designing an impact evaluation framework for other projects. Researchers can easily use the competencies in the matrix to design survey questions. Since the content for financial education interventions is designed based on the Financial Competency Matrix, questionnaires should incorporate the competencies included in workshop content.

CONTENT DEVELOPMENT

The Financial Competency Matrix and similar frameworks are helpful for policymakers to develop detailed and efficient financial education programs for target population groups. The CBA has applied the matrix to many different aspects of the NSFE, such as structuring and developing the financial education webpage of the CBA, https://abcfinance.am/.

Based on the competencies outlined in the matrix, various educational materials, articles, tips and tools were developed. Workshop content was also designed for people living in rural areas and two-day workshops were piloted in 50 villages of Armenia, the short-term effectiveness of classroom workshops has proved to be positive and significant (Kacarevic et. al. 2018).

APPLICATIONS IN POLICYMAKING

The Financial Competency Matrix for Adults is an important tool for policymakers to design, implement and measure effective financial education policies. Since 2014, the CBA has used the matrix to set policy priorities, design targeted interventions, monitor progress and communicate with the public and NSFE stakeholders.

TABLE 1: SCORING SYSTEM OF THE FINANCIAL CAPABILITY BAROMETER

<table>
<thead>
<tr>
<th>Topic</th>
<th>Knowledge</th>
<th>Skills</th>
<th>Attitude</th>
<th>Behavior</th>
<th>Topic scores (average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Economy</td>
<td>25%</td>
<td>64%</td>
<td>45%</td>
<td>24%</td>
<td>39%</td>
</tr>
<tr>
<td>b. Budgeting</td>
<td>54%</td>
<td>34%</td>
<td>54%</td>
<td>42%</td>
<td>46%</td>
</tr>
<tr>
<td>c. Saving and planning</td>
<td>27%</td>
<td>35%</td>
<td>43%</td>
<td>29%</td>
<td>34%</td>
</tr>
<tr>
<td>d. Debt management</td>
<td>30%</td>
<td>48%</td>
<td>52%</td>
<td>68%</td>
<td>45%</td>
</tr>
<tr>
<td>e. Shopping around</td>
<td>21%</td>
<td>78%</td>
<td>71%</td>
<td>23%</td>
<td>48%</td>
</tr>
<tr>
<td>f. Rights protection</td>
<td>37%</td>
<td>67%</td>
<td>57%</td>
<td>69%</td>
<td>58%</td>
</tr>
<tr>
<td>g. Security</td>
<td>10%</td>
<td>13%</td>
<td>75%</td>
<td>67%</td>
<td>41%</td>
</tr>
<tr>
<td>Component scores (average)</td>
<td>29%</td>
<td>48%</td>
<td>57%</td>
<td>44%</td>
<td>44%</td>
</tr>
</tbody>
</table>

3 The results of the long-term effectiveness of classroom workshops are not published yet.
BIBLIOGRAPHY


ACRONYMS

CBA Central Bank of Armenia
AFI Alliance for Financial Inclusion
ECAPI Eastern Europe and Central Asia Policy Initiative
CEMC Consumer Empowerment and Market Conduct
FCB Financial Capability Barometer
NSFE National Strategy for Financial Education
OECD Organisation for Economic Cooperation and Development
FID Financial Inclusion Data
EurAsEC Eurasian Economic Community