Methodological handbook for implementing an ex-ante assessment of agriculture financial instruments under the EAFRD

European Commission

European Investment Bank
The EU bank

ACKNOWLEDGEMENT

This handbook builds on and draws on the Ex-ante assessment methodology for financial instruments in the 2014-2020 programming period; General methodology covering all thematic objectives; Vol. 0-5; PWC; 'Framework Agreement for the provision of technical assistance and advisory services, within the context of the JESSICA initiative 37th assignment contract No CC3912 / PO62604' (EU COM and EIB, 2014).

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Glossary, acronyms and definition of terms

Expression	Explanation
ABER	Block Exemption Regulation for agriculture and forestry; according to Art 109 of the Treaty on the Functioning of the European Union (TFEU), the Council may determine categories of aid that are exempt from the notification procedure set out in Article 108(3) TFEU. ABER simplifies procedures for authorities granting aid and allows a range of measures to support SMEs active in the production of agricultural products.
Aid intensity	Indicator for assessing State aid issues: expressing aid as a percentage of eligible costs.
AIR	Annual Implementation Report.
Asymmetric profit sharing	Profit not shared equally between two partners (e.g. private and public), but in different proportions than their contributions (e.g. in order to attract private investment).
Beneficiary	A public or private body and, for the purposes of the European Agricultural Fund for Rural Development (EAFRD) Regulation and of the European Maritime and Fisheries Fund (EMFF) Regulation only, a natural person, responsible for initiating or both initiating and implementing operations; and in the context of State aid schemes, the body which receives the aid; and in the context of financial instruments (FIs) under the Common Provisions Regulation (CPR), Title IV of Part Two, it means the body implementing the FI.
Business angel	Individual providing capital and/or know-how for business start-ups, in exchange for convertible debt or equity.
CAP	Common Agricultural Policy.
Co-financing	All European Structural and Investment Funds (ESIF) resources are required to be co-financed by other public or private resources for managing authorities to be able to disburse these Funds. The Rural Development Programme (RDP) sets out how the EAFRD and its co-financing should be invested, either as grants or through FIs. Both the ESI Funds and the co-financing must be administered and spent in line with the applicable European Union regulations.
Co-financing rate	Co-financing rate for EAFRD as set down in Regulation (EU) No 1305/2013, Article 59. The minimum EAFRD contribution rate shall be 20%, the maximum EAFRD contribution rate is a percentage of eligible public expenditure and is: (i) 85% for less developed regions, outermost regions and smaller Aegean islands; (ii) 75% for regions whose GDP per capita for the 2007-2013 period was less than 75% of the average of the EU-25 for the reference period but whose GDP per capita is above 75% of the GDP average of the EU-27; (iii) 53% for transition regions: 63% of the eligible public expenditure; (iv) other regions. It is 100 % for Union-level FIs and for other FIs the contribution rate applicable to the measure concerned can be increased by an additional 10%.
Cohesion Policy	Cohesion Policy provides the framework for promoting economic growth, prosperity, and social integration across all 28 EU Member States. It aims to ensure that EU investment is targeted to Europe's long-term goals for growth and jobs ('Europe 2020').
Collateral	Loan security, (e.g. property or other assets) pledged for the repayment of a loan. If the borrower does not repay the loan as promised, the lender can seize the collateral to reimburse its losses.
COSME	The programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises (COSME) is improving access to finance for SMEs through two financial instruments that have been available since August 2014: the loan guarantee facility and the equity facility for growth.

Expression	Explanation
CSF	The Common Strategic Framework translates the objectives and targets of the EU strategy for smart, sustainable inclusive growth into key actions for the ESI Funds.
Concessional loan	Loan extended on terms substantially more generous than market loans. The concession is that interest rates, grace periods, or a combination of these are better than market conditions. Concessional loans typically have a long grace period.
CPR	Common Provisions Regulation: Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006.
de minimis	A rule introduced to exempt small amounts of aid from EU law/State aid agreement. Support from public funds for enterprises is limited. As an example, aid of no more than EUR 200 000 granted over a period of three years is not considered as State aid.
DG AGRI	Directorate General for Agriculture and Rural Development of the European Commission (EC).
DG REGIO	Directorate General for Regional and Urban Policy of the EC.
EAFRD	European Agricultural Fund for Rural Development.
Early-stage capital	Seed and start-up capital.
EaSI	Programme for Employment and Social Innovation.
EC	European Commission.
EE/RE	Energy Efficiency and Renewable Energy.
EEEF	European Energy Efficiency Fund.
EFSI	EFSI is an initiative launched jointly by the EIB Group and the European Commission to help overcome the current investment gap in the EU by mobilising private financing for strategic investments. EFSI is one of the three pillars of the Investment Plan for Europe that aims to revive investment in strategic projects around Europe to ensure that money reaches the real economy.
EIB	European Investment Bank.
EIF	European Investment Fund.
EIP	European Innovation Partnerships.
EMFF	European Maritime and Fisheries Fund.
Equity investment	Capital is invested directly or indirectly in return for total or partial ownership of a firm; the equity investor may assume some management control of the firm, may share the firm's profits and may sell the acquired shares.
ERDF	European Regional Development Fund.

Expression	Explanation
Economic sustainability	Economic sustainability: related to the concepts of cash flow and liquidity and is calculated as [net cash income]–([change in assets used between years]+[change in debt use between years]).
ESF	European Social Fund.
ESI Funds or ESIF	European Structural and Investment Funds for the programming period 2014-2020. This includes: ERDF, CF, ESF, EAFRD, and EMFF.
ESIF policies	Policies making use of the ESI Funds.
EU	European Union.
Ex-ante assessment	An assessment which precedes the ESIF programme contribution to a financial instrument and which establishes evidence of market failures or sub-optimal investment situations and the estimated level and the scope of public investment needs, including types of financial instruments.
Ex-ante evaluation	Ex-ante evaluation required for Programmes in line with Article 55 of the CPR. Prior to approval of RDPs within the 2014-2020 programming period, the CPR proposes an ex-ante evaluation during preparation of the programme to evaluate whether the proposed Programme will address the identified needs in the appropriate manner. This ex-ante evaluation is not to be confused with the ex-ante assessment of FIs.
Exit policy/ strategy	A policy/strategy for the liquidation of holdings by an investor, including repayment, trade sale, sale to another investor or financial institution and sale by public offering (including an Initial Public Offering).
Expiry date of repayment term	The expiry date refers to a date upon which a borrower should fulfil its last and final repayment obligation.
FADN	Farm Accountancy Data Network: an instrument for evaluating the income of agricultural holdings and the impacts of the Common Agricultural Policy. The FADN was launched in 1965, when Council Regulation 79/65 established the legal basis for the organisation of the network.
fi-compass	Platform for advisory services on FIs under the ESIF and microfinance under the EaSI. For further information please see the *fi-compass* website www.fi-compass.eu
Final recipient	A legal or natural person that receives financial support from an FI as described in Article 2(12) of the CPR.
Financial Instruments (FI)	Union measures of financial support provided on a complementary basis from the budget to address one or more specific policy objectives of the Union. Such instruments may take the form of equity or quasi-equity investments, loans or guarantees, or other risk-sharing instruments, and may, where appropriate, be combined with grants.
Financial intermediary	Entity acting as an intermediary between the managing authority or fund of funds and final recipients (e.g. bank, fund of funds, fund).
Financing gap	Imbalance between the demand and supply of financial resources.

Expression	Explanation
Focus area	EAFRD focus areas as defined by Regulation (EU) No 1305/2013, Article 5: 1.1. fostering innovation and the knowledge base in rural areas, 1.2. strengthening research and innovation links in agriculture and forestry, 1.3. fostering lifelong learning and vocational training in agriculture and forestry sectors, 2.1. facilitating restructuring of farms facing major structural challenges (notably farms with a low degree of market participation or market-oriented farms active in particular sectors or farms in need of agricultural diversification), 2.2. facilitating a balanced age structure in the agricultural sector, 3.1. better integrating primary producers into the food chain through quality schemes, promotion in local markets and short supply chains, producer groups and 'inter-branch' organisations, 3.2. supporting risk management on farms, 4.1. restoring and preserving biodiversity (including in NATURA 2000 areas and areas of High Nature Value farming) and the state of European landscapes, 4.2. improving water management, 4.3. improving soil management, 5.1. increasing efficiency in water use by agriculture, 5.2. increasing efficiency in energy use in agriculture and food processing, 5.3. facilitating the supply and use of renewable sources of energy, by-products, wastes, residues and other non-food raw materials for the bio-economy, 5.4. reducing nitrous oxide and methane emissions from agriculture, 5.5. fostering carbon sequestration in agriculture and forestry, 6.1. facilitating diversification, creation of new small enterprises and job creation, 6.2. promoting local development in rural areas, 6.3. enhancing accessibility to, and use and quality of information and communication technology' in rural areas.
FRR	Fair Rate of Return: risk adjusted rate of return that is comparable with other opportunities in the market segment for the type of investment.
Fund of funds	A fund set up with the objective of contributing support from a Programme or Programmes to several FIs. Where FIs are implemented through a fund of funds, the body implementing the fund of funds shall be considered the only beneficiary in the meaning of Article 2(27) of the CPR.
Funding agreement	A written agreement (e.g. contract) governing the terms and conditions for contributions from Programmes to FIs. This shall be established between the duly mandated representatives of the managing authority and the body that implements the fund of funds; and between the duly mandated representatives of the managing authority, or where applicable, the body that implements the fund of funds, and the body that implements the FI (Article 38(7) of the CPR. Ref; CPR Annex IV).

Expression	Explanation
GAFMA	Guidelines for SME Access to Finance Market Assessments: a methodology developed by the EIF to be used to prepare market assessments to identify market failures, suboptimal investment situations and investment needs related to the access to finance of micro-enterprises and SMEs. The GAFMA are published as an EIF Working Paper and are available from: http://www.eif.org/news_centre/research/index.htm.
Gross Grant Equivalent	This is calculated as a Net Present Value for State aid purposes.
GMI	Guarantees to launch Market Innovations in the Netherlands. Guarantee scheme under EAFRD which aims to address the shortcomings of the current instruments for financing market innovations in agriculture and horticulture.
Grant	Budgetary contribution from the EU or any Member State public institution. Also referred to as 'public subsidy'.
Guarantees	A written commitment to assume responsibility for all or part of a third party's debt or obligation or for the successful performance by that third party of its obligations if an event occurs which triggers such guarantee, such as a loan default.
Gross value added	Measures the value of goods and services produced.
InnovFin	InnovFin is a joint initiative launched by the EIB Group (EIB and EIF) in cooperation with the European Commission under Horizon 2020. It consists of a series of integrated and complementary financing tools and advisory services offered by the EIB Group.
JEREMIE	Joint European Resources for Micro to Medium Enterprises (an EC/EIB initiative for SME financing strictly using the Structural Funds) 2007-2013.
JESSICA	Joint European Support for Sustainable Investment in City Areas (an EC/EIB/Council of Europe Development Bank initiative for sustainable urban development and regeneration through financial engineering mechanisms) 2007-2013.
LEADER	LEADER ('Liaison Entre Actions de Développement de l'Économie Rurale') is a local development method which has been used for 20 years to engage local actors in the design and delivery of strategies, decision making and resource allocation for the development of their rural areas. It is implemented by around 2 600 Local Action Groups (LAGs), covering over 54% of the rural population in the EU and bringing together public, private and civil society stakeholders in a particular area. In the rural development context, LEADER is implemented under the national and regional Rural Development Programmes (RDPs) of each EU Member State, co-financed from the EAFRD.
Leverage effect	*'The Union contribution to a financial instrument shall aim at mobilising a global investment exceeding the size of the Union contribution according to the indicators defined in advance'.* Article 223 – The leverage effect of Union funds shall be equal to the amount of finance to eligible final recipients divided by the amount of the Union contribution. In the ESIF context, the leverage is the sum of the amount of ESIF funding and of the additional public and private resources raised divided by the nominal amount of the ESI Funds contribution.

Expression	Explanation
Loan	An agreement which obliges the lender to make available to the borrower an agreed sum of money for an agreed period of time and under which the borrower is obliged to repay that amount within the agreed time.
LSU	Livestock Unit: a coefficient used to determine the equivalent of one adult dairy cow for various species of livestock.
LTV	Loan to value: calculated as [total liabilities]/[total assets]. This is also called debt-to-asset ratio and it shows the financial risk of a company by measuring how much the assets have been financed through debt.
Management costs and fees	Management costs refer to direct or indirect cost items reimbursed against evidence of expenditure. Management fees refer to an agreed price for services rendered established via a competitive market process, where applicable. Management costs and fees are based on a performance based calculation methodology (Article 42(5) CPR).
Managing authority	Managing authority, as defined in the CPR regarding ESI Funds.
Market failure	Defined as an imperfection in the market mechanism that prevents economic efficiency.
Measure (rural development programme)	Defined as a set of operations contributing to one or more of the Union priorities for rural development.
Merit goods	Goods or services provided free for the benefit of society by a government, because they would be underprovided if left to market forces alone.
Mezzanine (Capital/Credit)	Type of high-yielding debt finance often seen in leveraged buy-out transactions and often featuring an option or right to acquire shares in a firm at a preferential rate. Mezzanine finance often takes the form of subordinated convertible loans.
Microfinance institution	Defined as an organisation that provides financial services to a clientele poorer and more vulnerable than traditional bank clients.
Microcredit	Small loans (usually up to EUR 25 000) granted to micro-enterprises (as defined by the EU) and to people sometimes excluded from access to finance. The loans are often short-term and with no or low collateral required. Usually, micro-enterprises obtain free business advisory and mentoring as well.
Multiplier ratio	For guarantees, the multiplier ratio is defined as the ratio between the amount of the programme contribution set aside to cover expected and unexpected losses from new loans or other risk-sharing instruments to be covered by the guarantees and the value of corresponding disbursed new loans or other risk-sharing instruments. (Article 8 DA 480/2014).
NPV	Net present value (of a cash flow).
Off-the-shelf FIs vs. tailor-made FIs	Standardised FI, predefined instrument vs. newly created instrument tailored to the specific conditions and needs.

Expression	Explanation
Operation	A project, contract, action or group of projects selected by the managing authorities of the programmes concerned, or under their responsibility, that contributes to the objectives of a priority or priorities; in the context of FIs, an operation is constituted by the financial contributions from a programme to FIs and the subsequent financial support provided by those FIs. In the case of FIs organised through a fund of funds, an operation is constituted by the contribution to the fund of funds, subsequent contributions to financial intermediaries and subsequent investments in final recipients.
Other revolving instruments	Defined in the context of this handbook to refer to funds which are similar to the FIs, for the eligible sectors, but which are not established under Title IV of the CPR.
Pari passu	Equal rights and obligations, such as a transaction made under the exact same terms and conditions for public and private investors. The opposite of *pari passu* is preferential investor/ private sector treatment, such as asymmetric profit sharing.
PPP	Public-private partnership.
Preferential remuneration	Term used to describe situations when the public sector is not treated *pari passu* because the private sector (e.g. commercial banks, private investors) is treated preferentially. That means that public sector funds are in a lower class in terms of repayment rights.
Programme	Programmes describe and justify the measures that national authorities intend to support under the different priority areas (axes). Programmes also include a financing plan with a breakdown of the budget for each year and the amounts earmarked for the different priorities over the whole programming period.
Proprietary farms	Farms managed by the land owners themselves.
Quasi-equity investments	These have both debt and equity characteristics in terms of ownership and claims on assets in the event of default. Some types of quasi-equity may be converted from debt to equity characteristics, and vice versa. Quasi-equity investments have a higher risk than senior debt and a lower risk than common equity. Examples include unsecured or subordinated debt, in some cases convertible into equity, or preferred equity.
RDP	Rural Development Programme co-financed by EAFRD under Regulation (EU) No 1305/2013.
RDR	Regulation (EU) No 1305/2013 of the European Parliament and of the Council on support for rural development by the EAFRD.
Revolving finance	Defined in the context of this handbook to refer to either all, or a subset of, FIs and other revolving instruments.
Revolving	The concept that contributions to FIs are repaid after a first utilisation (or cycle) and reutilised (i.e. revolved). Sometimes, the wording recycled is used as synonym.
Risk-sharing instrument	An FI which allows for the sharing of a defined risk between two or more entities, normally in exchange for an agreed remuneration.

Expression	Explanation
Securitisation	A transaction or scheme, whereby the credit risk associated with an exposure or pool of exposures is split into tranches, having both of the following characteristics: (a) payments in the transaction or scheme are dependent upon the performance of the exposure or pool of exposures; (b) the subordination of tranches determines the distribution of losses during the life of the transaction or scheme. For ESIF, securitisation is possible under the SME initiative (Article 39 CPR) only i.e. for ERDF and EAFRD contributions to the SME initiative.
SME	Small and medium-sized enterprises as per European Commission Recommendation 2003/361/EC.
Standard output	The average monetary value of the agricultural output at farm gate price, in EUR per hectare or per head of livestock.
Soft loan	Loans with no or below-market rate of interest (also known as soft financing or concessional funding). Sometimes soft loans also have other lenient terms such as long repayment periods or interest holidays.
Specific fund	A term used in the Summary Reports for 2011 and 2012. In the context of 'JESSICA type' of FIs refers to an urban development fund (UDF); in the context of 'JEREMIE type' refers to loan, guarantee or equity/venture capital funds investing in enterprises.
State aid	'State aid' means support paid by a Member State to an individual or organisation. It is regulated under Article 107(1) of the Treaty.
Structural Funds	EU Structural Funds (ERDF, CF, ESF) for the programming period 2007-2013.
Suboptimal investment situation	A situation where the existing investment activity is insufficient to achieve a policy objective or alternatively where investors/lenders call for collateral requirements above normal market levels, offer high interest rates which discourage investment, non-favourable repayment options, short duration loan tenors, etc.
SWOT analysis	Analysis of Strengths, Weaknesses, Opportunities and Threats.
Technical support	Grants for technical support, which are combined with an FI in a single operation are provided for the preparation of the prospective investment (please refer to Article 37(7), (9) of the CPR and Article 5 Regulation 480/2014).
TFEU	Treaty on the Functioning of the European Union.
Thematic objectives	Objectives supported by each ESI Fund in accordance with its mission to contribute to the Union strategy for smart, sustainable and inclusive growth (see Article 9 of the CPR).
Utilised agricultural area	Defined as the total area taken up by arable land, permanent pasture and meadow, land used for permanent crops and kitchen gardens.

Expression	Explanation
Union priorities for rural development	For the EU rural development policy (EAFRD) 'Thematic Objectives' are translated into Union priorities for rural development as defined by Article 5 of Regulation (EU) No 1305/2013 (EAFRD).
Urban regeneration/ development/ transformation	A range of actions aimed at sustainable renewal, rehabilitation, redevelopment and/or development of city areas, which may include area-based and city-wide initiatives supported by the ERDF and the Cohesion Fund.
Venture Capital	A specialist form of equity finance provided to seed, early-stage, emerging and emerging growth companies.
Winding-up	A process that entails selling all the assets of a fund, paying off creditors, distributing any remaining assets to the Principals, and then dissolving the fund. Essentially, 'Winding-up' is 'liquidation'.
Working capital	Difference between current assets and current liabilities of an enterprise.

Tip for reading:
Three different types of auxiliary boxes have been inserted for a better understanding of the handbook.

	Additional information
	Regulation reference
	Practical example / case study

i. Introduction

Financial Instruments (FIs) co-financed by the European Agricultural Fund for Rural Development (EAFRD) in the scope of Rural Development Programmes (RDPs) can be a sustainable and efficient way to invest in the growth and development of businesses and infrastructure in agriculture as well as in the rural economy. FIs co-funded by the EAFRD can contribute to several cross-cutting EU priorities for rural development:

- fostering knowledge transfer and innovation in agriculture and rural areas;
- enhancing competitiveness of all types of agriculture and enhancing farm viability;
- promoting organisation of the food chain;
- promoting resource efficiency and supporting the shift towards a low-carbon and climate resilient economy in the agriculture and food sectors; and
- promoting job creation, social inclusion, poverty reduction and economic development in rural areas, in particular for the creation and development of small enterprises.

The new legal and policy framework for rural development (under the EAFRD) encourages the use of FIs in addition to grant-based support, notably by widening the implementation options for FIs, the investments that can be supported through FIs and the potential final recipients. Financial products include:

- loans,
- guarantees,
- equity investments[1].

In the 2014-2020 period, all agricultural sub-sectors could benefit from support through EAFRD FIs. In line with the legal basis for 2014-2020, EAFRD FIs can support the implementation of all investment measures in rural development, provided that they address a market failure or sub-optimal investment situation. The latter has to be proven in an ex-ante assessment for the FI, which, under the requirements for the 2014-2020 programming period, must be completed by managing authorities before committing EAFRD (RDP) resources to an FI.

FIs may also be offered in combination with grants and other forms of assistance. It is often necessary to improve the investment readiness of farmers and rural businesses as a prerequisite for attracting investment funds. Advisory and training support can be provided through the EAFRD by using grants, contributing to modern, investment oriented farms with sufficient knowledge of business models, planning and financial management.

The purpose of this handbook is to serve as a guidance document for managing authorities preparing an ex-ante assessment with the intention to implement FIs under the EAFRD and, more specifically, those intending to implement FIs targeting investments in agricultural holdings, primary agricultural production activities and the first sale or direct sale of agricultural products. It reviews various agricultural sub-sectors, providing a comprehensive analytical approach towards financial needs in agriculture.[2] As such, it is designed to provide methodological advice on how to implement the ex-ante assessment for an agricultural FI, and includes illustrative step-by-step examples.

Specific requirements for the ex-ante assessment and its content are set out in Article 37 of Regulation (EU) No 1303/2013 (CPR) and are applicable to all FIs supported by the EAFRD. Therefore, the structure of this handbook follows the CPR requirements.

1 For a definition see Glossary.

2 For a recommendation on specifying sub-sectors, see Chapter 1 on market assessment.

This handbook on the ex-ante assessment also builds on the existing ESIF guidance[3] and on *fi-compass* guidance documents such as:

- *fi-compass* factsheet on 'The European Agricultural Fund for Rural Development – Financial instruments';
- EU COM and EIB (2014): Ex-ante assessment methodology for financial instruments in the 2014-2020 programming period; General methodology covering all thematic objectives; Vol. 0-5; PWC; 'Framework Agreement for the provision of technical assistance and advisory services, within the context of the JESSICA initiative 37th assignment contract No CC3912 / PO62604'; with special consideration of Vol 3: Enhancing the competitiveness of SME, including agriculture, microcredit and fisheries (Thematic objective 3) – Chapter 10 Specificities for the ex-ante assessment of financial instruments focused on agriculture (p.53ff);
- *fi-compass* factsheet on Financial instrument products – Loans, guarantees, equity and quasi-equity (2015);
- *fi-compass* factsheet on Developing an action plan – Design, set-up, implementation and winding-up of financial instruments (2015).

3 The EC Guidance on FIs includes, as at March 2016, Short reference guide for managing authorities, Ex-ante assessment, Support to enterprises/working capital, Request for payment, Combination of support, Eligible management costs and fees, Combination with EFSI, Interest and other gains and Glossary. For an up to date list, please see http://ec.europa.eu/regional_policy/en/information/legislation/guidance/ or www.fi-compass.eu/resources/ec

ii. Scope and purpose of the ex-ante assessment for FI

The ex-ante assessment for an FI is a legally required step by the CPR (Article 37) before creating and launching an FI in any RDP. The ex-ante assessment starts by identifying the needs detailed in the RDP and elaborates from there, assessing and describing to what extent FIs are able to address these needs. As such, the ex-ante assessments could be based on the Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis conducted and on the needs assessment outlined in the programme. However, the ex-ante assessment will go beyond the information provided by the RDP. In some cases, the ex-ante assessment may also lead to changes in the RDP, including its objectives and measures content.

The overall scope of the ex-ante assessment is to identify and describe the existence of market failures or suboptimal investment situations ('Market Assessment') as well as to define and assess the provisions available for the implementation of FIs ('Delivery and Management'). The ex-ante assessment should give the managing authority options to establish FIs and define priorities for the allocation of public resources in accordance with the RDP and its focus areas. In a nutshell the FI must:

- be fully aligned with RDP and EAFRD objectives;
- be the most appropriate response to an identified market failure and financing gap; and
- ensure that EAFRD resources are used according to the principles of relevance, effectiveness and efficiency of public spending.

A market failure can be defined as an '*imperfection in the market mechanism that prevents the achievement of economic efficiency.*'[4] Market failures for finance in particular territories or sectors can relate to economic phenomena such as imperfect or asymmetric information as well as unstable markets[5]. This may lead to viable businesses being refused finance:[6]

Market failure

Market failure exists, for example, with asymmetric information between the financial intermediary and the business. To assess risk, and to reduce costs associated with tailored risk assessments of the borrower, financial intermediaries sometimes require evidence of credit history and/or collateral. Some commercially viable businesses cannot provide this (e.g. young farmers starting their business). Asymmetric information may also be the reason for a banking policy that excludes certain business segments (e.g. specific limits on lending to farmers or a no-farm lending policy).

This situation can also be a result of a restricted risk capacity of the financial intermediaries caused by unstable markets in other business segments beyond agriculture.

Suboptimal investment situations *'represent a specific type of market failure for which FIs are particularly suitable and have been applied in the past. This issue is directly linked to the evidence of an investment gap. The gap has to be identified between the existing level of investment and quantitative EU, national or regional objectives'*[7].

4 HMT (2003) 'The Green Book: Appraisal and Evaluation in Central Government'. Available from: http://www.hm-treasury.gov.uk/d/green_book_complete.pdf

5 These can include markets facing high external risks (e.g. weather instability, unstable environmental conditions), or high market concentration on the supply or demand side of the market.

6 See BIS (2012) SME Access to External Finance, BIS Economics Paper, No 16, January 2012. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/32263/12-539-sme-access-external-finance.pdf

7 Ex-ante assessment methodology for financial instruments in the 2014-2020 programming period. (Volume 1). Available from: http://ec.europa.eu/regional_policy/en/information/legislation/guidance/

Suboptimal investment situations

In a suboptimal investment situation, the level of investment is insufficient to achieve a policy objective or alternatively where investors/lenders call for collateral requirements above normal market levels, offer high interest rates which discourage investment, non-favourable repayment options, short duration loan tenors, etc.

The insufficient investment activity may be caused by an under supply of finance to agricultural holdings due to the introduction of new regulations. If these regulations are to be met as quickly as requested, there can be financing gaps in the short run. This situation may occur with, for example, hygiene standards or animal welfare regulations. In other cases, there may be an imbalance of financing innovation in the agricultural sector although the know-how and capacity (e.g. through universities in the region) would in principle be there. Knowledge spillovers may be created through bridging this financing gap.

The unsatisfactory level of investment activity may also be caused by a too high level of financing cost, in cases in which banks are not able to assess the risk of the borrower due to asymmetric information.

What is important to note however, is that activities supported through FIs have to generate revenue or savings, thus limiting their application in the case of some types of market failure (e.g. externalities in the context of environmental damage).

The requirements for the ex-ante assessment in the CPR, Article 37(2) are listed in the box below, along with a short description associated with each requirement:

Table 1: Article 37(2) requirements contained in the CPR

Requirements	Description
a) An analysis of market failures, suboptimal investment situations, and investment needs for policy areas and thematic objectives or investment priorities to be addressed with a view to contributing to the achievement of specific objectives set out under a priority and to be supported through FIs. That analysis shall be based on available good practices methodology.	Identification of the main reasons, type and size of market failure and suboptimal investment situations with a good practice methodology; FI needs to contribute to the strategy and to the expected results of the relevant Programmes.
b) An assessment of the added value of the FIs that are being considered for support from the ESI Funds, consistency with other forms of public intervention addressing the same market, possible State aid implications, the proportionality of the envisaged intervention and measures to minimise market distortion.	Check the value added of the FI; Consistency with other forms of public intervention addressing the same market failure to limit gaps and overlaps and to avoid conflicts; Highlight any State aid implications including the proportionality of the envisaged intervention to the market needs; Measures to minimise market distortion from the FI.

Table 1: Article 37(2) requirements contained in the CPR

Requirements	Description
c) An estimate of additional public and private resources to be potentially raised by the FI down to the level of the final recipient (expected leverage effect), including, as appropriate, an assessment of the need for, and level of, preferential remuneration to attract counterpart resources from private investors and/or a description of the mechanisms which will be used to establish the need for, and extent of, such preferential remuneration, such as a competitive or appropriately independent assessment process.	Estimate additional public and private resources to be raised in support of the FI; Co-financing down to the level of the final recipient; Expected leverage effect; If relevant, an assessment of the need for and level of preferential remuneration to attract resources from private investors.
d) An assessment of lessons learnt from similar instruments and ex-ante assessments carried out by the Member State in the past, and how such lessons will be applied in the future.	Analysis of research into/evaluations of similar instruments; Analysis of similar ex-ante assessments; Application of these lessons to ensure the FI builds on existing knowledge.
e) The proposed investment strategy, including an examination of options for implementation arrangements within the meaning of Article 38, financial products to be offered, final recipients targeted and envisaged combination with grant support as appropriate.	Thematic and geographical coverage of the FI; Ensure appropriate implementation options (within the meaning of Article 38 CPR) are reviewed; Review potential financial products; Final recipients targeted; Any envisaged combination with grants to maximise efficiency and minimise EAFRD resources.
f) A specification of the expected results and how the FI concerned is expected to contribute to the achievement of the specific objectives set out under the relevant priority including indicators for that contribution.	Expected results and outputs of the FI within the priority of the Programme(s); Targets based on the specific contribution of the FI to the results and output indicators.
g) Provisions allowing for the ex-ante assessment to be reviewed and updated as required during the implementation of any FI which has been implemented based upon such assessment, where during the implementation phase, the managing authority considers that the ex-ante assessment may no longer accurately represent the market conditions existing at the time of implementation.	Rationale for revision of the ex-ante assessment; Practical and methodological procedures to update the ex-ante assessment; Procedures to adapt FI implementation.

Source: CPR, EIB (2014).

As required by Article 37(3) of the CPR, managing authorities have to submit a coherent document covering these seven items to the monitoring committee. There is no formal deadline for the finalisation of the ex-ante assessment (this can also be completed after the adoption of the RDP and/or during various stages of the RDP development), however it must be completed before the managing authority makes any contributions from the RDP to the FI. Finally, the summary findings and conclusions of the ex-ante assessment must be published within three months of the date it is finalised.

In summary:

Reader's guide

The handbook is **structured** around seven analysis steps corresponding with the seven regulatory requirements under Article 37 of the CPR.

The steps in this handbook are not necessarily unidirectional. The ex-ante assessment is a dynamic, iterative and interactive process which may require moving back and forth between these steps. If, while formulating the Proposed Investment Strategy a different FI is deemed preferable to the starting hypothesis, the value added of this new option must be assessed. This may lead to cross referencing of tasks during the ex-ante assessment.

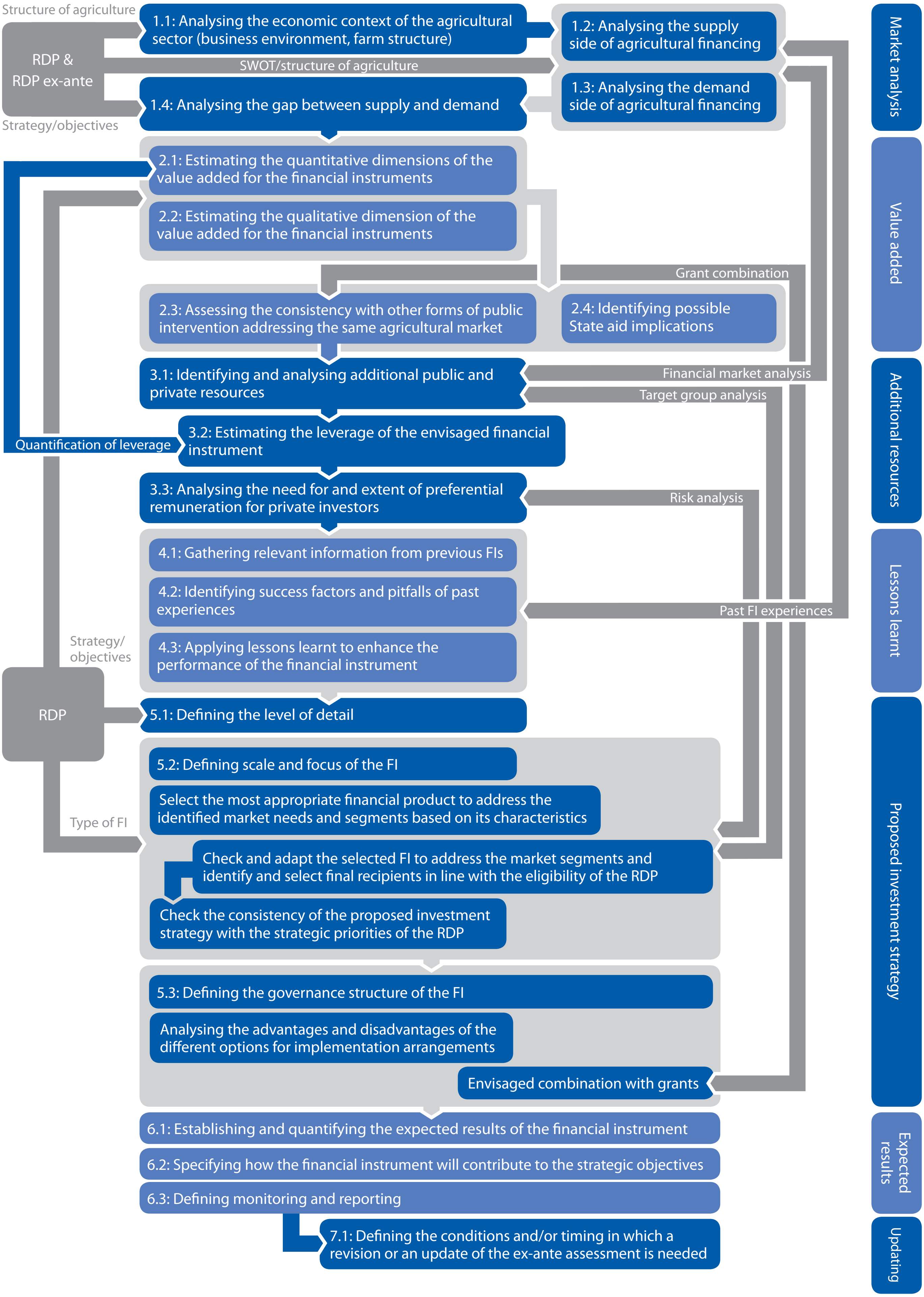
The **following chart** shows the most important logical connections between the seven steps (depicted and described by the red arrows). These links require a level of interlacing and cross referencing, especially when:

- integrating information from the RDP and the ex-ante evaluation of the RDP into the ex-ante assessment for the FI;
- incorporating experience from similar instruments and similar ex-ante assessments, if and when appropriate;
- gathering and analysing information on existing financial offers to targeted final recipients;
- establishing performance targets – quantification of effects;
- analysis of financial product risks such as calculating the multiplier for guarantee funds.

The chart demonstrates graphically the **seven steps** of the ex-ante assessment (on the right hand side) and the respective sub-steps. The blue arrows mark the sequence of the sub-steps whereas the red arrows mark possible cross-referencing relations between sub-steps.

This handbook follows the **sequence of steps and sub-steps** in the following chapters – however whenever cross-references to other sections may be considered this will be marked specifically by blue arrows indicating the cross-referenced section. Green arrows in the text will guide the reader to sections in the annexes where additional and more detailed information is provided.

Figure 1: Process logic



iii. What managing authorities need to know before starting the ex-ante assessment

The decision to introduce an FI needs to first fit with the RDP, its objectives and measures. In this context, an ex-ante assessment may even indicate the need for introducing new, not yet programmed, (sub-) measures. The RDP would then need to be revised, to include the (sub-) measures, before FIs can be introduced. Specific elements to be considered when assessing an RDP are, inter alia, access to funding, the financial products, the scope of the intervention (i.e. investments to be supported and eligibility criteria to be respected) and the targeted final recipients. Generally, FIs are introduced in RDPs:

1. *when the RDP is first adopted*
   - The RDP has identified the need for an FI and has established the investment strategy and implementation, including relevant elements from the investment strategy. This has to be based on a finalised (or sufficiently advanced) ex-ante assessment for the FI.

2. *after the RDP was adopted* – when the RDP strategy identified the need for an FI, but has not specified the investment strategy.
   - The ex-ante assessment for the FI is conducted together with designing the investment strategy.

3. *after the RDP was adopted* – when the RDP strategy did not initially identify the need for an FI.
   - The need for an FI emerges later (e.g. driven by economic circumstances), in this case the RDP strategy has to be revised.

The ex-ante assessment can be conducted while revising the RDP, but it must precede the modification of the RDP in order to introduce an FI. This means that the RDP should be modified taking into account the results of the ex-ante assessment.

Before starting the ex-ante assessment, the managing authority needs to ensure consistency and coherence with the RDP:

- *Consistency with the intervention logic*
  The RDP is based on a coherent strategy, intervention logic and implementation measures. The FI needs to address the Union priorities for rural development and contribute to the relevant focus areas and measures objectives. The measures and focus areas may be separate or combined when implementing the FI, which depends on the investments and/or sub-sectors of agriculture. Furthermore, the FI indicators need to be consistent with the expected outputs, results and impact of each priority, focus area and measure.

- *Consistency in financial terms*
  If the FI is funded from different measures, allocation of the financial contributions needs to be reviewed, taking into account limited resources and the need to prioritise budgetary allocation in line with the RDP strategy. Any combination of support between grants and FIs has to be properly reflected. The effectiveness, efficiency and relevance of allocated resources need to be emphasised.

- *Consistency with governance structures*
  The FI needs to be consistent with the RDP governance arrangements. In Member States with regional RDPs, there can be a national FI, therefore cooperation between the managing authorities is very important and the governance structure set for the FI at national level needs to reflect this cooperation.

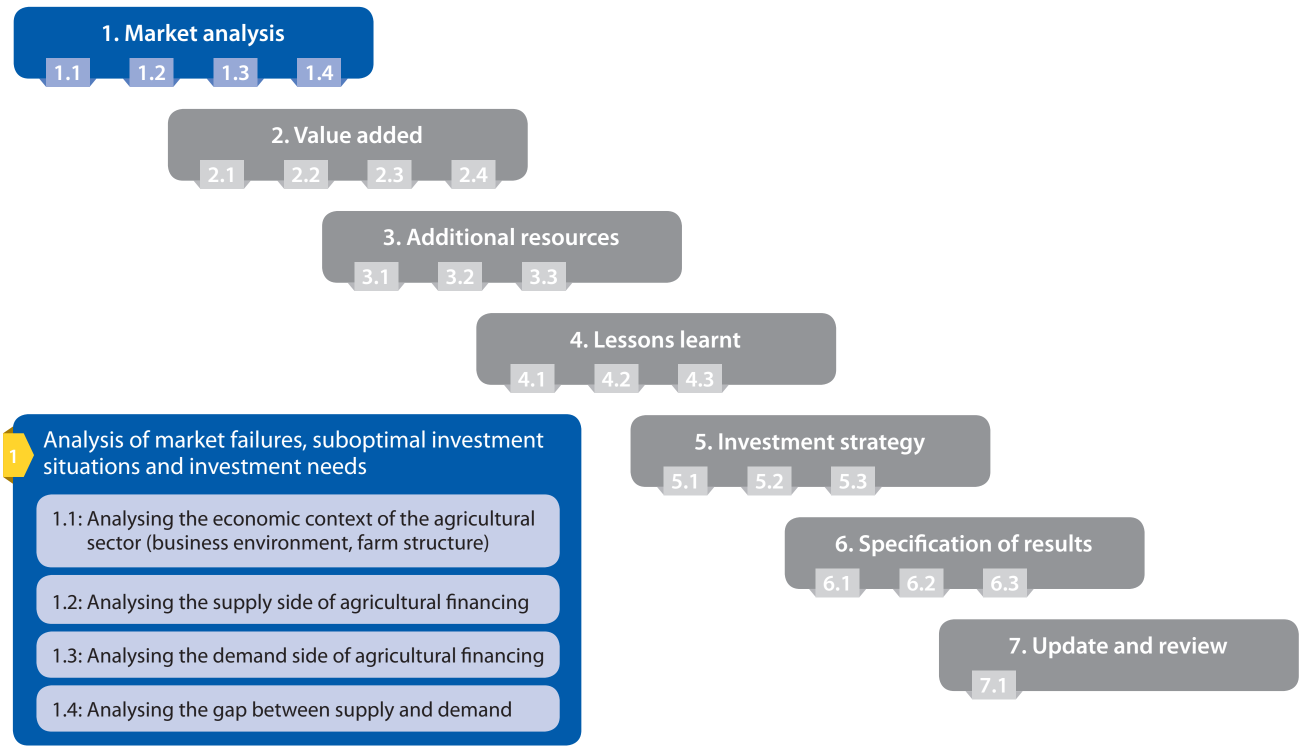
The following seven chapters will outline each of the seven steps required in ex-ante assessments for FI instruments, as set out in Article 37 of Regulation (EU) No 1303/2013 (CPR).

BUILDING BLOCK 1: MARKET ASSESSMENT

1. ANALYSIS OF MARKET FAILURES, SUBOPTIMAL INVESTMENT SITUATIONS AND INVESTMENT NEEDS

FIs for agriculture under EAFRD must be established on the basis of the evidence of market failure or suboptimal investment situations in the agricultural sector. This first part of the ex-ante assessment consists of four steps:

Figure 2: Steps for analysis of market failures, suboptimal investment situations and investment needs, following CPR, Art 27(2)(a)



When identifying and quantifying market failures and suboptimal investment situations, the following questions should be answered:

- Step 1.1
  - What aspects of the economic environment and what structure of agricultural holdings (e.g. in terms of size and sector concentration) affect the sector's financing options and how?

- Step 1.2
  - What sources and financial products are available?
  - What is the structure of the financial sector, for example agricultural banks, other commercial banks, microfinance institutions, investment funds, or venture capital funds. To what extent does this structure impact access to finance for farmers?
  - What are the financial constraints of the agricultural holdings?
  - What sorts of public funding[8] are available for agricultural holdings and in what form are these provided?
  - Which agricultural holdings or agricultural sub-sectors are excluded from financing, or find it difficult to borrow for investments?

- Step 1.3
  - What is the potential and/or viable demand for financial products that support agriculture in that market?
  - What types of financial products are agricultural holdings looking for, particularly in the context of what potentially could be provided by an FI?
  - What additional investment situations do the RDP objectives imply?

- Step 1.4
  - What gap, if any, could be identified and quantified on the basis of supply and demand analysis?

1.1 Analysing the economic context of the agricultural sector

1.1.1 Scope

Agricultural holdings differ from most other businesses in terms of capitalisation and financing options. The return on investment is uncertain due to natural risks such as climate and weather as well as commodity market volatility and trade measures. Collateral, such as investment portfolios or land, are often not available and agricultural assets such as livestock, remote farm buildings, or machinery are not accepted by banks, considerably limiting access to funding.

1.1.2 Proposed methodological elements

An overview of the economic conditions relevant to the subsectors within the geographical context of the programme area to be covered by the FI includes:

- an analysis of the agricultural economy at the national and/or regional level, including logistics and infrastructure where relevant;
- an analysis of external influences on the agricultural sector. Local and international influences include the volatility of agricultural products, political and regulatory factors as well as trade and competition;
- an analysis of agricultural business weaknesses;
- an analysis of the farm structure including the average farm size, agricultural income and sector concentration.[9]

Agricultural sub-sectors could be separately analysed when investment and production cycles, or the level of capitalisation, differ.

8 Comprising EU co-financed, national and regional funds.

9 Based on EC/EIB (2014c): Ex-ante assessment methodology for financial instruments in the 2014-2020 programming period. Enhancing the competitiveness of SME, including agriculture, microcredit and fisheries (Volume 3).

In practice, an analysis of the economic context of the farming sector should already form part of the RDP needs analysis and strategy (SWOT) and/or the ex-ante evaluation required under Article 8 Regulation (EU) No 1305/2013 (EAFRD Regulation[10]). The ex-ante assessment can then build on these analyses wherever possible or even contribute to their improvement.

see Annex 2.2

Literature review and data analysis is essential in this respect. Indicators such as Gross Value Added, employment in agriculture, and information on the qualification and age of farmers, agricultural income and average farm size may help determine the access to finance for farmers.[11] Other indicators such as production volume evolutions, price developments and foreign direct investment trends in the sector could also contribute to such analyses.

Sectoral information is available, for example, from the farm structure survey and the economic accounts for agriculture. It is also important to review past events (such as the 2008 financial crisis) which may have had major effects on the present resilience of farms. External influences and market weaknesses that may negatively influence such resilience in the agricultural sector include:

- the overall economic situation (e.g. declining domestic production, changes in consumer behaviour and global demand);
- price fluctuation, which may lead to reduced incomes;
- changes in policy or trade barriers (e.g. abolition of the milk quota) that may be causing insecurity or may create new growth potential;
- rising energy prices that may cause difficulties (e.g. for energy intensive horticulture);
- extreme events (hail, floods, vermin, etc.) that may have negatively influenced the agricultural economy in certain regions or products.

It is advisable to separately analyse sub-sector and regional specifics where relevant.

The Farm Accountancy Data Network (FADN) (see Box 1) includes indicators for capital development and reinvestment cycles. Integrating information from the farm structure survey or national equivalents is recommended. Below are some examples of farm structure indicators that can be considered.

- Key farm variables: area/livestock (LSU), labour force and standard output by size of farm, measured by the utilised agricultural area, can highlight the financial situation of the sector.
- The share of different crops and types of farming for different farm sizes helps estimate the capital requirements. For instance, intensive farming, horticulture or viticulture is usually more dependent on external financing.
- The goods produced (degree of processing, substitutable products vs. specialisation) may indicate a dependency on global markets. Quality or highly processed products have higher prices and more predictable revenues than standardised and substitutable goods.

10 Regulation (EU) No 1305/2013 of the European Parliament and of the Council of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005.

11 See EC/EIB (2014c): Ex-ante assessment methodology for financial instruments in the 2014-2020 programming period. Enhancing the competitiveness of SME, including agriculture, microcredit and fisheries (Volume 3) .

Box 1: Using the Farm Accountancy Data Network

The FADN is an instrument for evaluating the income of agricultural holdings and impact of the CAP. The FADN was launched in 1965 and every year since then has collected data from a sample of agricultural holdings in the European Union. Derived from national surveys, the FADN is the only harmonised source of microeconomic data. Holdings are selected on the basis of sampling plans established at the level of each region in the Union. The survey only covers commercial agricultural holdings. The methodology provides representative data along three dimensions: region, economic size and type of farming. While the European Commission is the primary user of analyses based on FADN-data, aggregated data can be found in the *Standard Results* database.

The aim of the network is to determine incomes and provide a business analysis of agricultural holdings. Currently, the annual sample covers approximately 80 000 of the five million farms in the EU. These farms cover approximately 90% of the utilised agricultural area and about 90% of agricultural production. Results may be blurred as the sample leaves out smaller farms. Community FADN Farm Return data is available for every year, usually with a delay of 2-3 years. The information for each sample farm has about 1 000 variables and is transmitted by Liaison Agencies. The specific questionnaire called Farm Return variables refer to:

- physical and structural data, such as location, crop areas, livestock numbers, labour force, etc.;
- economic and financial data, such as the value of crops, stocks, sales and purchases, production costs, assets, liabilities, production quotas and subsidies, including those connected with the application of CAP measures;
- weaknesses/words of caution.

Source: EC (2015b) *Farm Accounting Data Network*, available via: http://ec.europa.eu/agriculture/rica

The FADN data includes a wide array of indicators that may be used to assess the financial situation of agricultural holdings.

Box 2: FADN indicators related to market assessment

Farm net value added is gross farm income minus depreciation. It is used to remunerate the fixed factors of production (work, land and capital), whether they are external or family factors. As a result, agricultural holdings can be compared regardless of the family/non-family nature of the factors of production. Farm Net Value Added = output + CAP payments + VAT balance – intermediate consumption – farm taxes (income taxes are not included) – depreciation.

Farm net worth is defined as the difference between total assets and total liabilities at the end of the accounting year.

Total assets are the sum of current and fixed assets. Current assets include non-breeding livestock, stock of agricultural products and other circulating capital, holdings of agricultural shares, and amounts receivable in the short-term, such as cash in hand or in the bank. Fixed assets are agricultural land, permanent crops, farm and other buildings, forest capital, machinery and equipment, and breeding livestock.

Return on assets measures the effectiveness of assets to generate revenue. It is the ratio of net income divided by total assets. Net income is the sum of Farm Net Value Added and net subsidies less wages, rent and the opportunity cost of labour.

Liability is the value of long-, medium-, or short-term loans still to be repaid.

Solvency is the ratio of liabilities to assets. This gives an indication of a farm's ability to meet its obligations in the long term (or its capacity to repay liabilities if all the assets were sold).

Source: EC/DG AGRI, 2013.

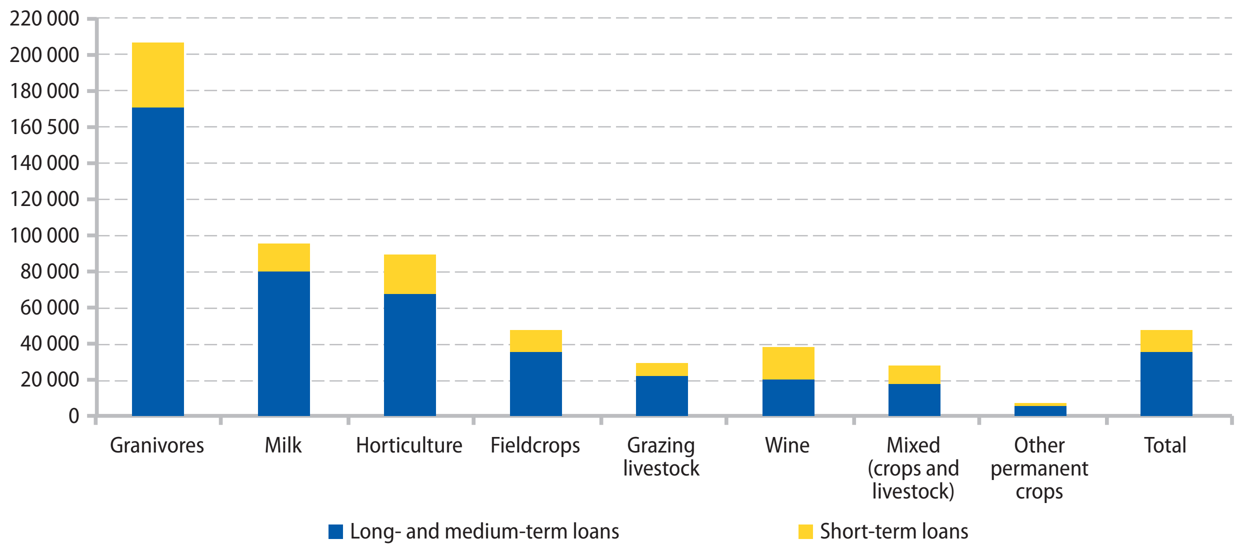
The EU Farm Economics series issued by the EC is based on FADN data[12] and gives an overview of the financial situation of European farms. There are also numerous sector studies available on the topic. For example, under FADN, statistical groupings of types of farming (TF) include the 'TF8 Grouping' which is an interesting option for analysing financing issues as it includes:

- field crops (including oilseeds and protein crops);
- horticulture (indoor and outdoor);
- wine;
- other permanent crops (including fruit and citrus fruit, olives);
- milk (dairy);
- other grazing livestock (including cattle, dairying, rearing and fattening combined, sheep, goats and other grazing livestock);
- granivores (pigs, poultry);
- mixed production.

Managing authorities are also encouraged to conduct sub-sectoral analyses, since production cycles, income flows and investment needs (and their types, size, total volumes, etc.) may differ considerably between subsectors.

Example 1.1.1

Practical Example of FADN 2012 data – Liabilities per farm by type of farming in the European Union (in EUR)



In 2012 farms specialised in granivores, dairy and horticulture had, on average, the highest total liabilities. This mirrors the high asset values of these farm types. Permanent crop holdings recorded the lowest liabilities in 2012, but they had the second lowest asset values as well.

Medium- and long-term loans were the dominant liability for all farm types. Short-term loans only played a significant role in wine holdings, where they accounted for around 45 % of total liabilities.

Source: EC/DG AGRI, 2013:35.

12 Most recent: EC/DG AGRI (2013): EU farm economics 2012 based on FADN data. Available from: ec.europa.eu/agriculture/rica/pdf/EU_farm_economics_2012.pdf (July 2015).

Additional sources of information may be statistical databases such as Eurostat[13] and national or regional statistics offices, since most of the relevant indicators are part of the set of common indicators for RDP monitoring. Other quantitative sources, such as data published by official institutions, associations and stakeholders, publications from scientific institutions, universities and think tanks, as well as research from banks, rating agencies, central banks and insurance companies, should be taken into consideration. At the same time, the managing authorities may do their own, more detailed surveys, in cases where there is no, or limited, data availability.

see Annex 2.1

Matching target final recipients with the requirements of the RDP measure and the quality and prerequisites of the FI is detailed later in the ex-ante assessment process (see Chapter 5). However, some working assumptions and preliminary types of FIs are needed for the analysis of any market gap or suboptimal investment situation.

Cross Ref. Section 5

1.2 Analysing the supply side of agricultural financing

Once the economic context and overall market situation have been analysed, financing supply and demand should be compared. This comparison can be in sequence.

- Step 1.2
  - The supply side of organisations financing agricultural activities.
- Step 1.3
  - The demand side of agricultural undertakings.

1.2.1 Scope

The objective of the supply-side analysis is to quantify the funding available to agricultural holdings in the programme area. This analysis could be a two-step process:

1. identifying the public and private providers of finance to agriculture with both the sources and the types of financial products;
2. quantifying the funding potentially available to agricultural holdings, if possible by financial product.

1.2.2 Proposed methodological elements

Identifying the providers and types of financial products

The supply analysis needs to provide an inventory of the financial providers and products[14], the terms and conditions for agricultural holdings, any restrictions and the past volumes. A limited range of financial products with restrictive conditions compared to other businesses is often a factor limiting access to finance for agriculture. Holdings may not be able to access financing because they cannot comply with the terms and conditions of the providers. For instance, agricultural holdings often have difficulties meeting the requirements for collateral. They may not have enough regular cash flow to repay a loan consistently (e.g. because of the dependency on weather, type of production process or market price fluctuations) or they may have delayed returns on investments (e.g. permanent crops). Compared to other sectors, agricultural businesses have more volatile returns and perhaps lower resilience to external influences such as the weather, commodity market price volatility, trade barriers, unexpected trade limitations[15], or public concern regarding diseases.

13 For an overview of relevant Eurostat datasets please consult annex A.2 Proposed sources and tools.
14 Usually loans, guarantees and equity.
15 For example politial embargoes.

Quantifying the funding available to agricultural holdings

This is a prerequisite for estimating any financing gap. Managing authorities can use statistical data, which in most cases is published or available on request from National Central Banks. However, in many cases the only available information is the volume of loans outstanding to the agricultural sector. Therefore the volume of new lending has to be estimated using data such as FADN (see below). This information should be analysed over a period of at least the previous three years, and could be potentially applied for projections for at least the next three years.

Where data is only available for the whole primary sector[16], the ex-ante assessment should try to estimate the share of credit for the agricultural sector. If the FI is part of a regional RDP and no regional credit data are available, a regional break down calculation may be needed. Managing authorities may be able to use proxies, for example the share of regional Gross Value Added in agriculture based on the national Gross Value Added in agriculture, to perform these break down calculations.[17]

One of the most valuable resources for estimating financing for agriculture is the FADN. Although few very small farms are represented, a number of indicators could still be applied to highlight the supply (for instance long- and medium- term loans, short-term loans, total liabilities). This should help provide more accurate estimates.

The FADN data could be differentiated by:

- region,
- economic size,
- production type (TF14 Grouping or TF8 Grouping),
- farms in less-favoured areas or not less-favoured areas, etc.

The major supply side indicator is the volume of lending, or total loans, which can usually be calculated or estimated from existing data sources. The average term to maturity can be estimated or investigated in a dedicated survey. [18]

The following box outlines the parameters for calculation and the potential sources of information that can be used in estimating volume of lending.

16 Agriculture, forestry and fishing.

17 See EC/EIB (2014c): Ex-ante assessment methodology for financial instruments in the 2014-2020 programming period. Enhancing the competitiveness of SME, including agriculture, microcredit and fisheries (Volume 3).

18 Apart from these quantifications using statistical data, specific types of financing in agriculture may be considered. Capital investment needs may already be covered by grants for certain holdings. In addition to loans and grants, there are other financing sources for farm holdings that could be estimated, particularly agricultural leasing, farm co-operatives and family loans. In most cases, statistics concerning the volume of these additional financing sources will not be available and will need to be estimated based on information provided by sector associations or organisations, such as agricultural co-operatives, chambers of agriculture or farmers associations.

Box 3: Quantification method for lending volume (supply side)

Parameters	Potential sources
Volume of loans per year = (Farms in database sample + Farms not represented) * Total long-, medium- and short-term loans (per year)	 FADN database, similar accountancy databases Eurostat, Farm structure statistics (or national databases with similar information) FADN database, similar accountancy databases
Average volume of lending per year = Volume of loans per year / Average term to maturity	 Estimates, interviews, target group survey[19]

If statistical sources are incomplete or not up to date, qualitative information and triangulation of different levels of data should be used. Focus groups involving farmers and/or their unions, interviews, meetings with representatives of financial intermediaries or other stakeholders providing finance for rural purposes, should be taken into consideration.

The evaluation of past FIs for agriculture, including EU-funded or national instruments, is one source of information. Many Member States have experience with public or semi-public FIs, sometimes provided by national or regional authorities, sometimes by public banking institutes or social security institutions. The data on how much financing has been provided and how much financing has been collected by final recipients is the best starting point for this analysis.

Cross Ref. Section 4

In the annex we present an analysis of the loans and liabilities and the relationship between assets and liabilities in three Member States.

Example 1.2.1

Practical Example: Calculation of total loans using FADN data

The FADN provides information on the average loan per farm differentiated between short- and medium-term loans, and the number of farms represented by the FADN. The example includes four variables[20]:

Farms represented: Sum of weighting coefficients of individual holdings in the sample. Sum of the weights of the farms in the (sub-) sample.

Long- and medium- term loans (average in EUR per farm): Loans of more than one year.

Short-term loans (average in EUR per farm): Loans of less than one year and outstanding cash payments.

Total liabilities (average in EUR per farm): Value of total, medium- or short-term loans still to be repaid.

The managing authority can use this information to estimate total loans to agricultural holdings. As mentioned above, the FADN only represents agricultural holdings over a certain size.[21]

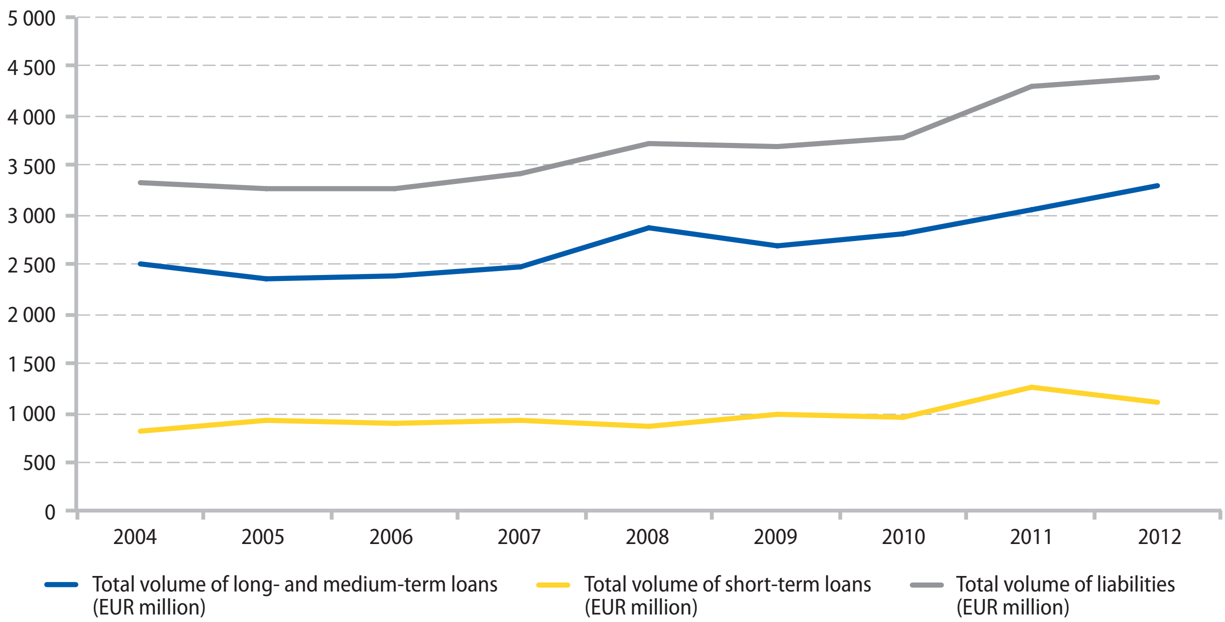
19 An example question being (also see survey example in the Annex): What is/was the payback period (maturity) of the loan?

20 Source: Farm Accounting Data Network. An A to Z of methodology. Version 04/11/2010 23:14:03. Available from: http://ec.europa.eu/agriculture/ricaprod/pdf/site_en.pdf.

21 EC/DG AGRI (2013): EU farm economics 2012 based on FADN data, Annex 3: Threshold by Member State in 2009 (ESU: European size units).

Austria	Farms represented	Long & medium-term loans (avg/farm)	Short-term loans (avg/farm)	Total liabilities (avg/farm)	Total volume of long- and medium-term loans (EUR million)	Total volume of short-term loans (EUR million)	Total volume of liabilities (EUR million)
2004	91 070	27 497	8 968	36 464	2 504	817	3 321
2005	91 780	25 673	10 023	35 696	2 356	920	3 276
2006	95 840	24 836	9 245	34 081	2 380	886	3 266
2007	90 560	27 315	10 308	37 623	2 474	933	3 407
2008	88 790	32 212	9 793	42 005	2 860	870	3 730
2009	86 540	31 227	11 518	42 744	2 702	997	3 699
2010	93 200	30 112	10 336	40 447	2 806	963	3 770
2011	92 790	32 805	13 642	46 448	3 044	1 266	4 310
2012	93 270	35 311	11 937	47 248	3 293	1 113	4 407

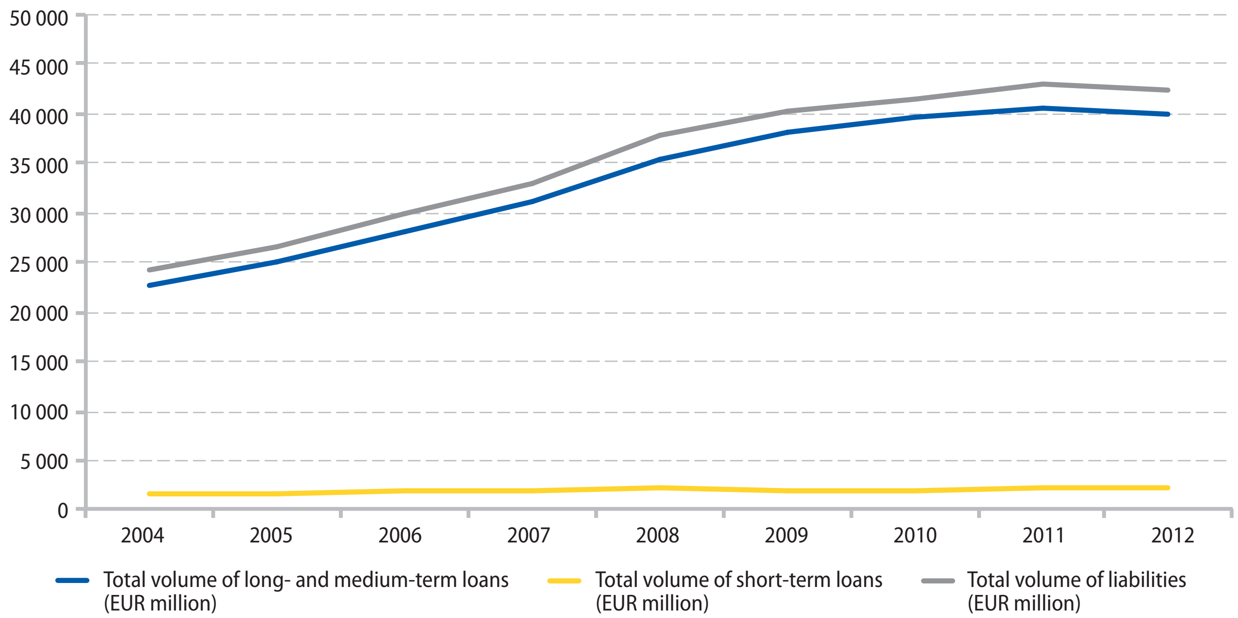
Produced by EUFADN Database 12/05/15 15.34.06



In Austria, there were loans of EUR 4.4 billion in 2012. Liabilities are generally low per farm, the volume is rising but is not very volatile except for a slight increase in 2008 (financial crisis).

Denmark	Farms represented	Long & medium-term loans (avg/farm)	Short-term loans (avg/farm)	Total liabilities (avg/farm)	Total volume of long- and medium-term loans (EUR million)	Total volume of short-term loans (EUR million)	Total volume of liabilities (EUR million)
2004	33 850	670 310	46 086	716 397	22 690	1 560	24 250
2005	32 790	762 381	52 016	814 397	24 998	1 706	26 704
2006	33 650	831 994	56 524	888 518	27 997	1 902	29 899
2007	28 950	1 072 212	64 932	1 137 144	31 041	1 880	32 920
2008	28 780	1 233 326	83 165	1 316 491	35 495	2 393	37 889
2009	27 690	1 382 022	72 654	1 454 676	38 268	2 012	40 280
2010	28 700	1 379 012	70 280	1 449 292	39 578	2 017	41 595
2011	28 700	1 418 651	75 543	1 494 194	40 715	2 168	42 883
2012	28 760	1 389 749	80 420	1 470 169	39 969	2 313	42 282

Produced by EUFADN Database 12/05/15 15.34.06



In Denmark, loans totalled EUR 42 billion in 2012. Liabilities are very high per farm[22], and increased significantly over the period. The effect on collateral for Danish farms in the near future should be considered.

22 The main reason for this is very high land prices, see EU farm economics 2012/DG AGRI EU-FADN.

Romania	Farms represented	Long & medium-term loans (avg/farm)	Short-term loans (avg/farm)	Total liabilities (avg/farm)	Total volume of long- and medium-term loans (EUR million)	Total volume of short-term loans (EUR million)	Total volume of liabilities (EUR million)
2007[23]	1 289 250	1 201	634	1 835	1 548	817	2 366
2008	1 289 250	608	339	0 948	784	437	1 222
2009	1 042 920	813	483	1 297	848	504	1 353
2010	1 042 610	750	432	1 182	782	450	1 232
2011	1 042 260	461	570	1 030	480	594	1 074
2012	1 042 390	457	284	741	476	296	772

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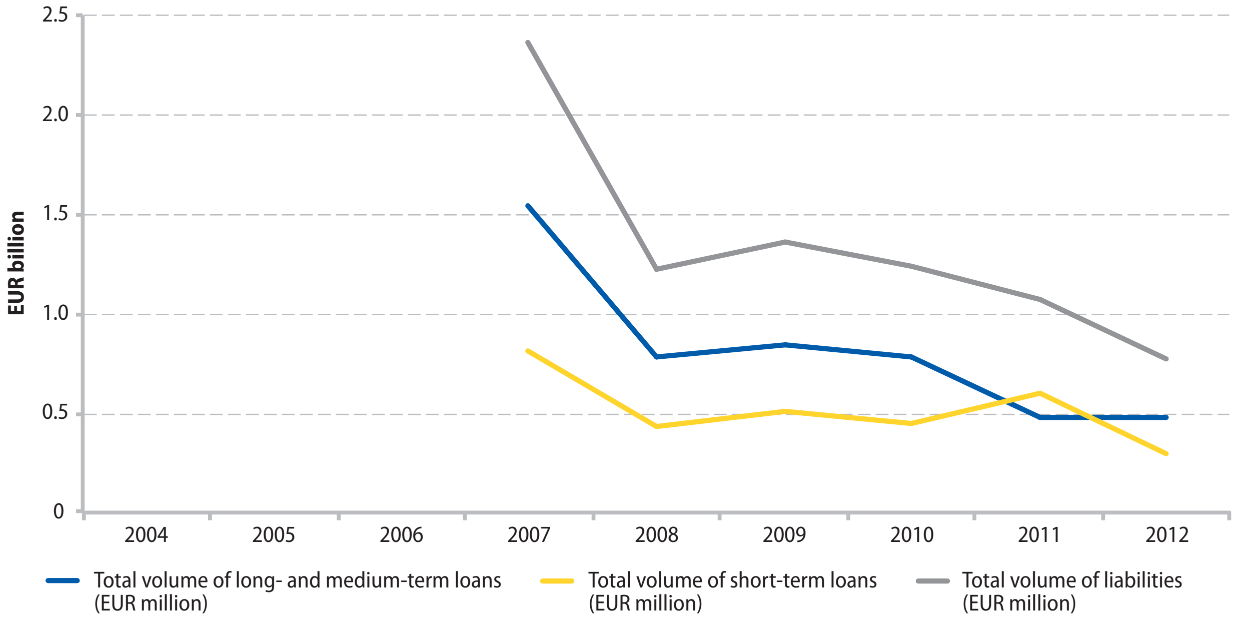


In Romania, loans totalled EUR 772 million in 2012. Liabilities are extremely low per farm, averaging around EUR 1 000. The next step should be to assess whether this is caused by market failure or not.

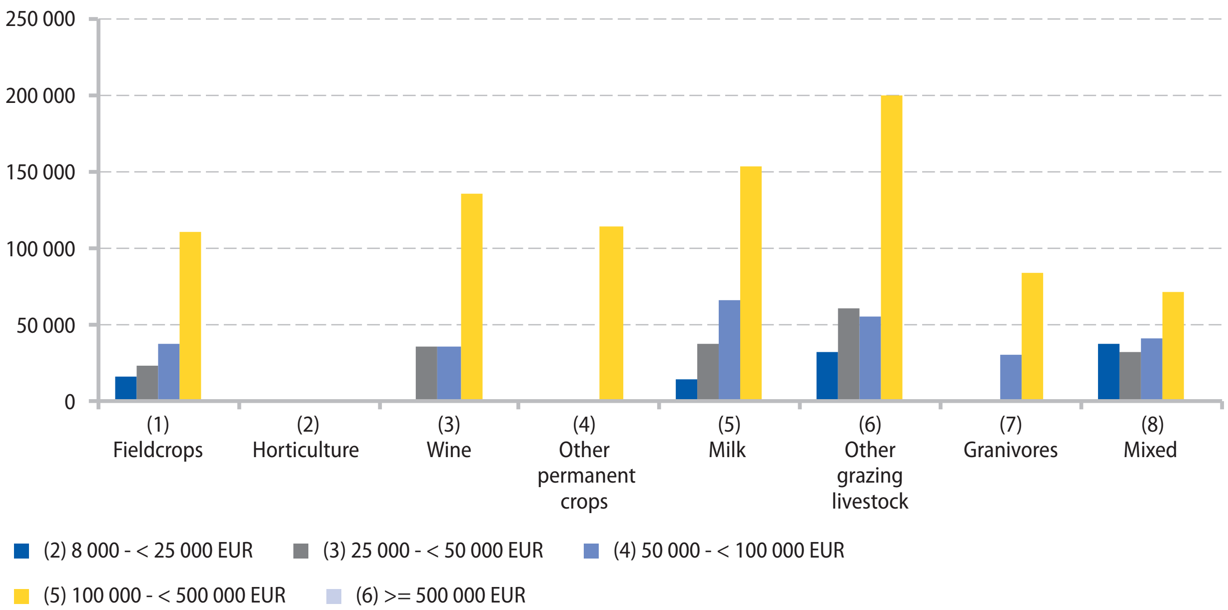
23 2004-2006 data not available from FADN.

Example 1.2.2

Practical Example: Calculation of loans by production type and size using FADN data

Austria	EC Size class (6) [24]	Total liabilities						
		(1) Field crops	(2) Horticulture	(3) Wine	(4) Other permanent crops	(5) Milk	(6) Other grazing livestock	(7) Granivores
2012	(2) EUR 8 000 – < 25 000	15 345	-	-	-	14 761	32 521	-
2012	(3) EUR 25 000 – < 50 000	23 911	-	36 046	-	38 215	61 163	-
2012	(4) EUR 50 000 – < 100 000	36 826	-	36 019	-	65 723	55 173	29 825
2012	(5) EUR 100 000 – < 500 000	110 130	-	136 237	114 201	153 814	199 859	84 764
2012	(6) >= EUR 500 000	-	-	-	-	-	-	-

Produced by EUFADN Database 12/05/15 17.07.24

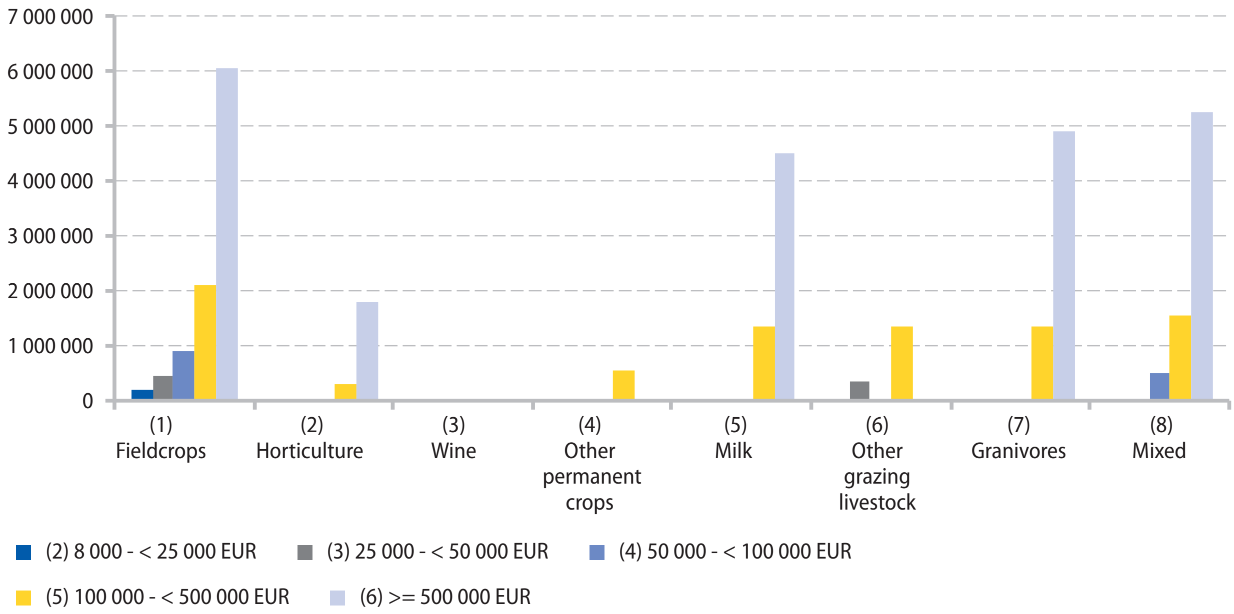


Liabilities per farm in Austria rise significantly with size but there are some exceptions. Mixed and viticulture farms below EUR 100 000 have comparable liabilities. Grazing livestock farms have more loans between EUR 25 000 – 50 000 than between EUR 50 000 – 100 000. This may highlight a demand for specific financial products which should be explored later on in the analysis.

24 Certain size classes not available in FADN because of lack of representation or privacy protection.

Denmark	EC Size class (6)	Total liabilities						
		(1) Field crops	(2) Horticulture	(3) Wine	(4) Other permanent crops	(5) Milk	(6) Other grazing livestock	(7) Granivores
2012	(2) EUR 8 000 – < 25 000	198 381	-	-	-	-	-	-
2012	(3) EUR 25 000 – < 50 000	457 536	-	-	-	-	352 824	-
2012	(4) EUR 50 000 – < 100 000	879 512	-	-	-	-	-	-
2012	(5) EUR 100 000 – < 500 000	2 080 990	318 787	-	557 396	1 367 314	1 368 508	1 369 469
2012	(6) >= EUR 500 000	6 071 631	1 816 220	-	-	4 512 034	-	4 891 055

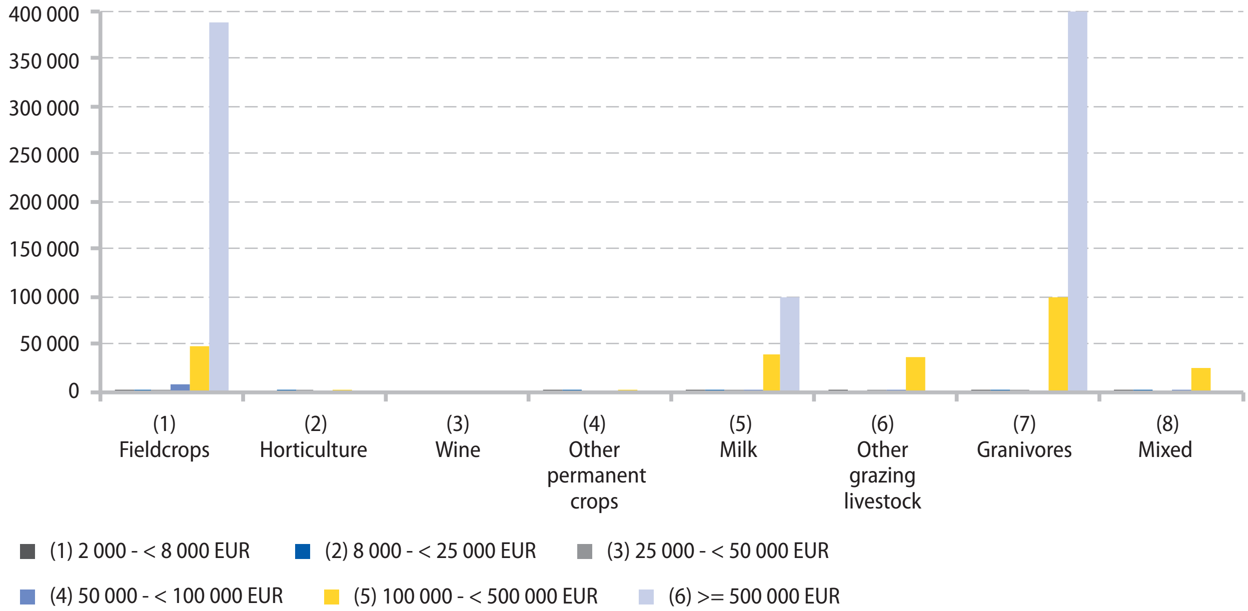
Produced by EUFADN Database 12/05/15 17.07.24



In Denmark, liabilities are much higher in all subsectors than they are in Austria. This might provide additional insight on the issue of collateral mentioned earlier in the analysis.

Romania	EC Size class (6)	Total liabilities						
		(1) Field crops	(2) Horticulture	(3) Wine	(4) Other permanent crops	(5) Milk	(6) Other grazing livestock	(7) Granivores
2012	(1) EUR 2 000 – < 8 000	10	0	0	23	5	24	270
2012	(2) EUR 8 000 – < 25 000	134	138	0	32	3	0	76
2012	(3) EUR 25 000 – < 50 000	695	615	0	0	376	77	1 875
2012	(4) EUR 50 000 – < 100 000	8 054	-	-	-	472	345	-
2012	(5) EUR 100 000 – < 500 000	47 684	4	-	1 844	39 687	36 439	99 395
2012	(6) >= EUR 500 000	387 715	-	-	-	100 913	-	838 555

Produced by EUFADN Database 12/05/15 17.07.24



In Romania, only the largest farms have notable liabilities. Another aspect to explore would be why there are very few dynamic investments in the sector.

The analysis could also include an estimate of outstanding credit for small farms which are not covered by the FADN. In countries or regions where there are many small farms this would be very important. This could be done in two steps:

- quantify the number of farms not represented in the FADN;
- estimate the average volume of loans outstanding for such farms which could be based on the smallest size class in the FADN.

Example 1.2.3 illustrates such an estimate. The plausibility and robustness of the data on credit volume should be discussed with market experts such as commercial banks, consultants or interested parties through interviews or focus groups.

Example 1.2.3

Fictitious Example: Estimating loans including for farms not in FADN

Based on the above FADN data the agricultural loan volume in Austria would be estimated at EUR 5.2 billion.

	FADN 2012	Farms not in FADN 2012*	Total estimated loan volume
Farms represented	93 270	75 000	
Long- and medium-term loans (avg/farm)	35 311	7 500	
Short-term loans (avg/farm)	11 937	2 500	
Total liabilities (avg/farm)	47 248	10 000	
Total volume of long- and medium-term loans (EUR million)	3 293	562	3 855
Total volume of short-term loans (EUR million)	1 113	187	1 300
Total volume of liabilities (EUR million)	4 406	750	5 156

* Assumptions based on size classes and national statistical data. Produced by EUFADN Database 12/05/15 17.07.24

In proprietary farms[25] there is no differentiation between business assets and private assets.[26] That means that a part of the loan might serve for non-business investments such as improved accommodation or private-use vehicles. Therefore only part of the total credit is relevant for the supply-side analysis. Supply-side analysis for such FIs could focus on the share of gross fixed capital formation in different asset classes (e.g. agricultural products, machines and

25 Farms managed by the land owners themselves.

26 See: Jansson, K. H; Huisman, C. J.; Lagerkvist, C., J.; Rabinowicz, E. (2013): Agricultural Credit Market Institutions. A Comparison of Selected European Countries. Factor Markets Working Paper No. 33, January 2013.

other equipment, transport equipment, farm buildings)[27] on total gross fixed capital formation in agriculture[28] or the composition of assets as provided by the FADN.[29]

Once the overall size of agricultural credit markets has been analysed and quantified it is necessary to show lending per year by estimating the average maturity of the outstanding loans. This could be based on a target group survey and/or interviews with market experts. Example 1.2.4 illustrates a fictitious estimate of lending per year.

Example 1.2.4

Fictitious Example: Estimated lending per year

The average credit period for agricultural loans could be 10 years, for instance. Assuming the lending per year and average credit period are constant, the average maturity is five years. Taking the Austrian example above, loans outstanding to agricultural holdings (EUR 5.157 billion) would be about EUR 1.031 billion (=5.157/5) per year.

Caveat: This example is idealised. In the real world, a drought or wildfires could destroy crops in a large area: lending could drop or shoot up in one or two years skewing the supply/demand assumptions significantly.

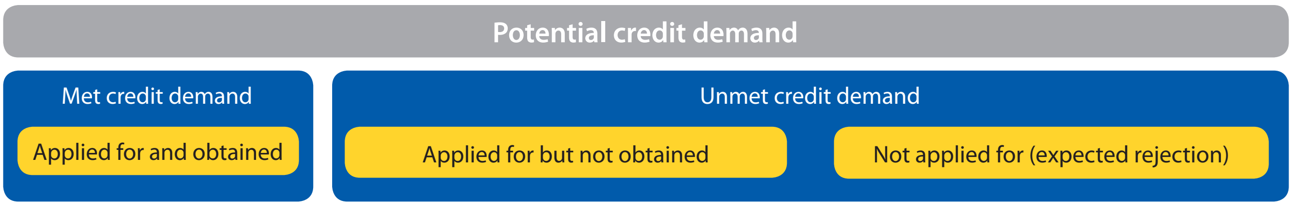
Source: EC/EIB (2014c): Ex-ante assessment methodology for financial instruments in the 2014-2020 programming period. Enhancing the competitiveness of SME, including agriculture, microcredit and fisheries (Volume 3).

1.3 Analysing the demand side of agricultural financing

1.3.1 Scope

Potential credit demand encompasses not only successful applications as assessed in Step 1.2, but also the unmet credit demand. This includes credits not obtained due to banking policy, lack of credit history, or lack of collateral of the applicant. It also includes credits not applied for, due to expected rejections[30]. Unmet demand includes viable and non-viable applications.

Figure 3: Schematic overview of the demand side of agricultural financing



Unmet credit demand needs to be explored in the demand side analysis which should focus on bankable demand and exclude rejections due to poor creditworthiness. These are not related to market failure and do not require public intervention.

27 EC/EIB (2014c): Ex-ante assessment methodology for financial instruments in the 2014-2020 programming period. Enhancing the competitiveness of SME, including agriculture, microcredit and fisheries (Volume 3).

28 Data available at Eurostat (aact_eaa01).

29 Land, permanent crops & quotas (code SE446), buildings (code SE450), machinery (Code SE455), breeding livestock (SE460), http://ec.europa.eu/agriculture/rica.

30 See: EC/EIB (2014c): Ex-ante assessment methodology for financial instruments in the 2014-2020 programming period. Enhancing the competitiveness of SME, including agriculture, microcredit and fisheries (Volume 3).

1.3.2 Proposed methodological elements

Quantifying total unmet credit

After loan volume this is the next prerequisite for estimating any gap between financial supply and demand. Unmet credit includes lending applied for but not obtained and lending planned but not applied for due to expected rejection (methods see Box 4).

Box 4: Quantification method of unmet credit demand (demand side)

Parameters	Potential sources
Total unmet credit demand per year	
=	
(Volume of lending applied for per year	Target group survey[31], literature
-	
Average volume of lending per year)	Target group survey[32], FADN database, similar accountancy databases
+	
Volume of lending planned but not applied for per year	Target group survey[33], literature

There is no standard way to measure demand; the examples below are a pragmatic approach that may need to be adapted for the specific programme area and agricultural sector.

Cross Ref. Section 4

Evaluation of EU-funded or national FIs for agriculture implemented in the past can provide valuable information.

Research on access to finance for agricultural holdings in Europe is scarce. A good methodological approach, from the Guidelines for SME Access to Finance Market Assessments (GAFMA)[34], is to analyse demand, supply, country/regional comparisons and conclusions by financial product.

For Europe including the Candidate Countries, the Factor Markets Projects[35] analyses may help shape estimates for agriculture markets. One survey[36], for instance, highlighted the most important factors for rejecting a loan. Other studies on market failure or sub-optimal investment in the agricultural credit markets at the national level can also provide valuable information.

31 Example question (also see survey example in the Annex): How much loan funding did you APPLY for during the last three years?

32 Example question (also see survey example in the Annex): How much loan funding did you OBTAIN during the last three years?

33 Example question (also see survey example in the Annex): How much loan funding did you PLAN BUT NOT APPLY for because you expected rejection during the last three years?

34 Kraemer-Eis, H.; Lang, F. (2014): Guidelines for SME Access to Finance Market Assessments (GAFMA). Working Paper 2014/22, EIF – Research & Market Analysis.

35 The project partners issued a series of working papers that deal with financing issues in the agricultural sector. http://www.factormarkets.eu/ (May 2015).

36 Jansson, K. H; Huisman, C. J.; Lagerkvist, C., J.; Rabinowicz, E. (2013): Agricultural Credit Market Institutions. A Comparison of Selected European Countries. Factor Markets Working Paper No. 33, January 2013.

A tailored target group survey[37] could assist with the quantification of demand and estimate future financing gaps. Again, covering the previous three years and, at least, the next three years is recommended. This could be done in cooperation with farmers' representatives and/or specialised agricultural banks. The data will enable analysis of:

see Annex 3

- rejection rate, possibly for different loan sizes (which can also help define the investment strategy, e.g. if there were high rejection rates only on small loans, an FI could provide loans to small farmers);
- reasons for rejections and whether these reflect market failure [38];
- the volume of lending planned but not applied for (lack of applications).

Example 1.3.1

Fictitious Example: Quantifying unmet credit demand based on a target group survey

Assumptions: This simplified example assumes that the estimate from the target group survey equals the total liabilities projected in FADN (5.157 billion) over the next five years (as in Example 1.2.4, broken down by a sample of farms (1 000 instead of 93 270 from FADN and 75 000 not in FADN).

The target group survey had a sample of 1 000 farms[39] and asks for information concerning the last three years. So the 1 000 sample farms had loans (line 3) of EUR 18 million over the previous three years (6.129 * 1 000 * 3).[40] We further assume that this represents 80% of the potential demand or 125% of the realised demand, i.e. EUR 23 million in three years (line 4). The total unmet credit demand of the last three years would be the remaining EUR 4.6 million (line 5). Of this, an assumed 1/3 is from lack of applications (line 2). For the yearly financial gap, see Step 1.4.

Parameters (partly from survey questions)	EUR	% of potential credit demand
What credit (in EUR) did you APPLY for during the last three years?	21 452 278	-
What credit (in EUR) did you NOT APPLY for during the last three years because you expected rejection?	1 532 306	-
What credit (in EUR) did you OBTAIN during the last three years? (= realised credit demand)	18 387 667	80%
Total potential credit demand during the last three years	22 984 583	100%
Total unmet credit demand during the last three years	4 596 917	20%

Sample = 1 000 farms

This simplified example could be enriched by calculating results from the target group survey[41], farm size classes, types of loans (short-term, medium-term, long-term, preferential loans, subordinated, etc.) or different sub-sectors.

37 See survey example in the Annex.

38 Rejections need to be identified because the underlying business model or business structure did not support investment. Such rejections are not market failure (see gap analysis next step). In other cases, the low quality of business plans can be explained by an insufficient knowledge of how such plans are to be developed. This may trigger grant support under the EAFRD for advisory services, or technical assistance within the FI to ensure that quality levels are reached.

39 = 0.6% out of 168 270 in Austria.

40 Example question: What credit (in EUR) did you OBTAIN in the last three years? (= realised credit demand).

41 For example, see in the Annex.

see Annex 2.4

The plausibility of the rejection rates can be discussed with market experts, for instance in the form of Focus Groups ('methods and tools' in the Annex). A broad view on the reasons for rejection is important as the lender and the applicant may have different views.

The target group survey should include questions concerning farmers' investment forecasts compared to the current situation (decline/unchanged/increase). Additional questions should refer to the expected financial needs and availability for the next three years (improve/unchanged/deteriorate). Such information is indispensable for estimating future financing gaps.

Qualitative demand (for financial products)

Cross Ref. Section 5.2

Qualitative demand here means demand for specific financial products or a mix of financial products which may differ from region to region and from subsector to subsector. Thus, demand should normally be analysed for each financial product separately. It is recommended to now look back at Steps 1.1 and 1.2 to estimate which mix of products would be the most suitable for the proposed investment strategy.

- Demand for guarantees is very diverse across Europe. With higher land prices – for instance in fertile or urbanised areas – this may not be an issue because of the high collateral value of the land. In more remote regions or with low land prices, collateralisation may be more difficult. Similarly, as in the instances where farmers operate (predominantly) on rented land. But, where agricultural holdings already have high liabilities– because of development pressure on agricultural land such as in the Netherlands or Denmark – the resources are often fully collateralised and government guarantees may be needed to finance new investments.
- Loans may be subject to changing demand. In many regions and in times of high interest rates or fluctuating commodity prices, volatile or negative cash flow means businesses may not be able to afford market financing or be able to repay loans on a regular basis. Loans with government participation may also be demanded where investments are not fully productive, for instance, in the bio-economy or in resource efficiency. Microcredits as a specific loan segment may be demanded for investing in small-scale innovative projects, for instance diversification strategies such as farm holiday infrastructure, product processing facilities, or farm shops.
- Equity may be suitable in agricultural enterprises similar to SMEs. These include higher risk and potentially higher growth firms – for example, holdings undergoing diversification or SMEs in the agri-food sector investing in capacity or new processing technology, or in new, distinguishable products (e.g. taste, ingredients, etc.).

The Factor Markets Project[42] proposes indicators based on FADN data that can provide indications on the viability of demand':

- **Loan to value (LTV)** is calculated as liabilities/assets. This is also called debt-to-asset ratio and shows the financial risk of a company by measuring how much of the assets have been financed through debt.
- **Economic sustainability** is related to cash flow and liquidity and is calculated as [net cash income]–([change in asset use]+[change in debt use]). This shows what the farmer has left for private consumption after all costs have been covered.

In the Annex we present the methodology for calculating these indicators based on FADN data in practical examples.

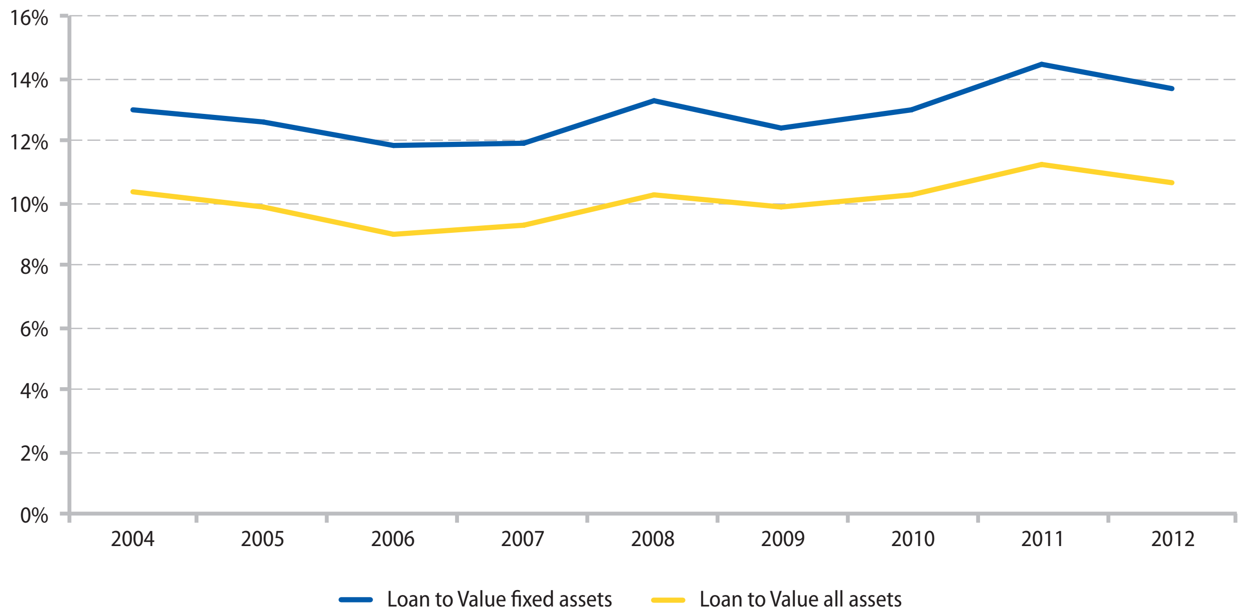
42 Jansson, K. H; Lagerkvist, C., J. (2013): Performance Indicators in Agricultural Financial Markets. Factor Markets Working Paper No. 43, May 2013.

Example 1.3.2

FADN data can be used to analyse the LTV to show the availability of collateral that can reduce the risk for creditors. The FADN provides data on fixed assets, current assets and liabilities. A high LTV will indicate few assets are available as collateral, a low LTV could mean farmers have more capacity to get finance. However, the use of collateral in agriculture is not without difficulties including the lack of demand for agricultural land or used machinery and problems with liquidation. So the LTV for different asset categories is likely to differ.

Austria	Total fixed assets	Total current assets	Total liabilities	Loan to Value all assets	Loan to Value fixed assets
2004	281 067	70 291	36 464	10%	13%
2005	283 521	79 494	35 696	10%	13%
2006	287 791	91 214	34 081	9%	12%
2007	315 041	90 697	37 623	9%	12%
2008	316 776	93 848	42 005	10%	13%
2009	343 617	87 889	42 744	10%	12%
2010	311 216	84 575	40 447	10%	13%
2011	320 748	94 235	46 448	11%	14%
2012	346 038	95 671	47 248	11%	14%

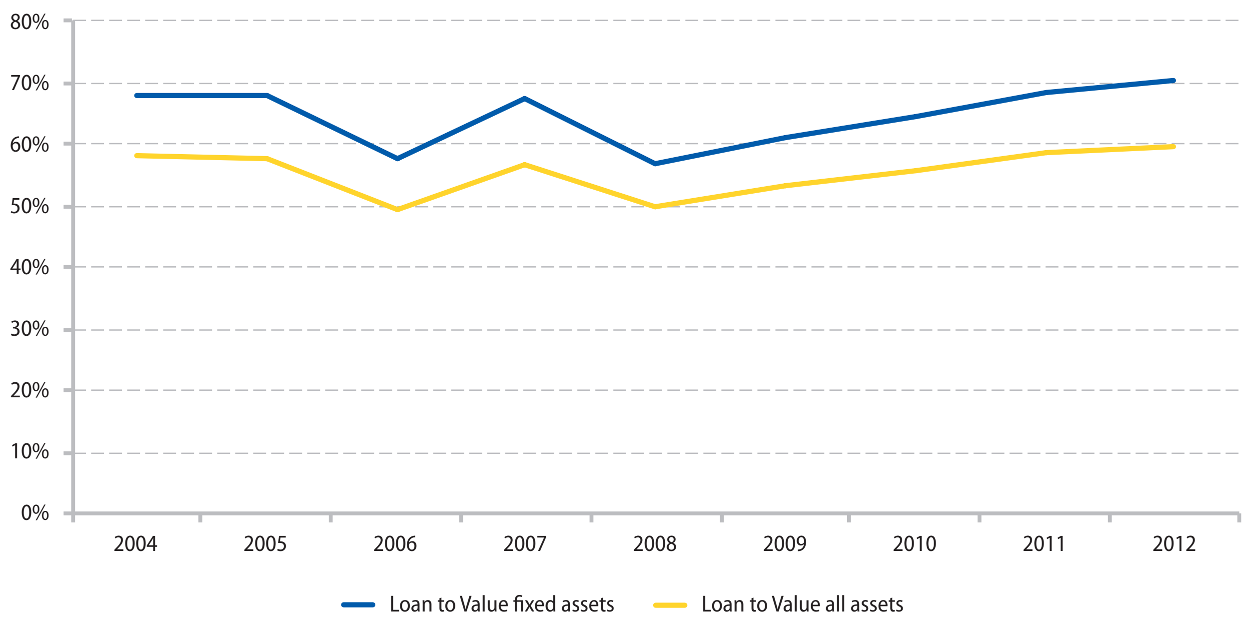
All numbers in EUR except where indicated. Produced by EUFADN Database 12/05/15 21.20.41



In Austria, the LTV on fixed assets is around 13% and stable. This means that there are probably assets available as collateral. Therefore, whether EAFRD-backed guarantees are needed, should be further explored.

Denmark	Total fixed assets	Total current assets	Total liabilities	Loan to Value all assets	Loan to Value fixed assets
2004	1 052 728	182 330	716 397	58%	68%
2005	1 197 366	218 978	814 397	57%	68%
2006	1 547 763	251 585	888 518	49%	57%
2007	1 684 313	329 259	1 137 144	56%	68%
2008	2 317 563	326 868	1 316 491	50%	57%
2009	2 382 555	343 447	1 454 676	53%	61%
2010	2 255 019	352 718	1 449 292	56%	64%
2011	2 183 815	360 254	1 494 194	59%	68%
2012	2 098 121	369 580	1 470 169	60%	70%

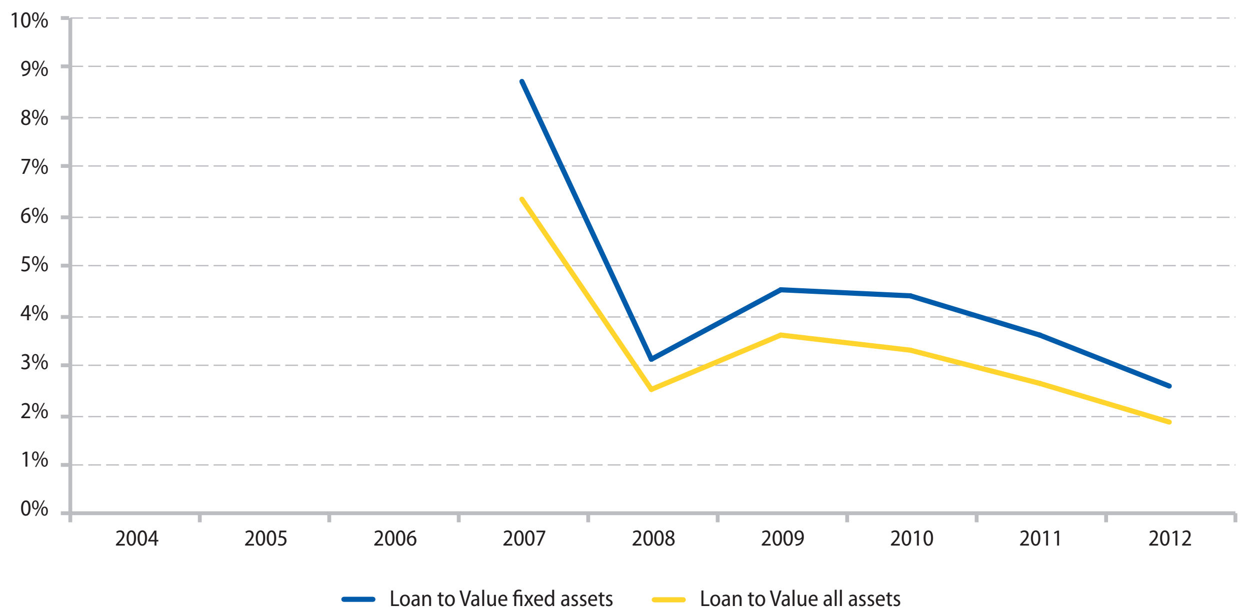
All numbers in EUR except where indicated. Produced by EUFADN Database 12/05/15 21.20.41



In Denmark, the LTV on fixed assets is relatively stable but very high between 60% and 70% (probably because of high land prices and high production costs). Therefore Danish holdings could have problems financing new investments because of a lack of collateral. This could be further assessed through in-depth interviews.

Romania	Total fixed assets	Total current assets	Total liabilities	Loan to Value all assets	Loan to Value fixed assets
2007[43]	21 029	7 736	1 835	6%	9%
2008	30 405	7 073	948	3%	3%
2009	28 681	7 349	1 297	4%	5%
2010	26 885	8 631	1 182	3%	4%
2011	28 351	10 903	1 030	3%	4%
2012	28 621	11 136	741	2%	3%

All numbers in EUR except where indicated. Produced by EUFADN Database 12/05/15 21.20.41



In Romania, the LTV on fixed assets is very low and now down to 3%. Additionally, it is fluctuating strongly (this can probably partly be explained by changes in FADN reporting where, between 2008 and 2009, there was a major decrease in farms represented). This indicates that any market failure is probably not related to collateral.

43 2004-2006 data not available from FADN.

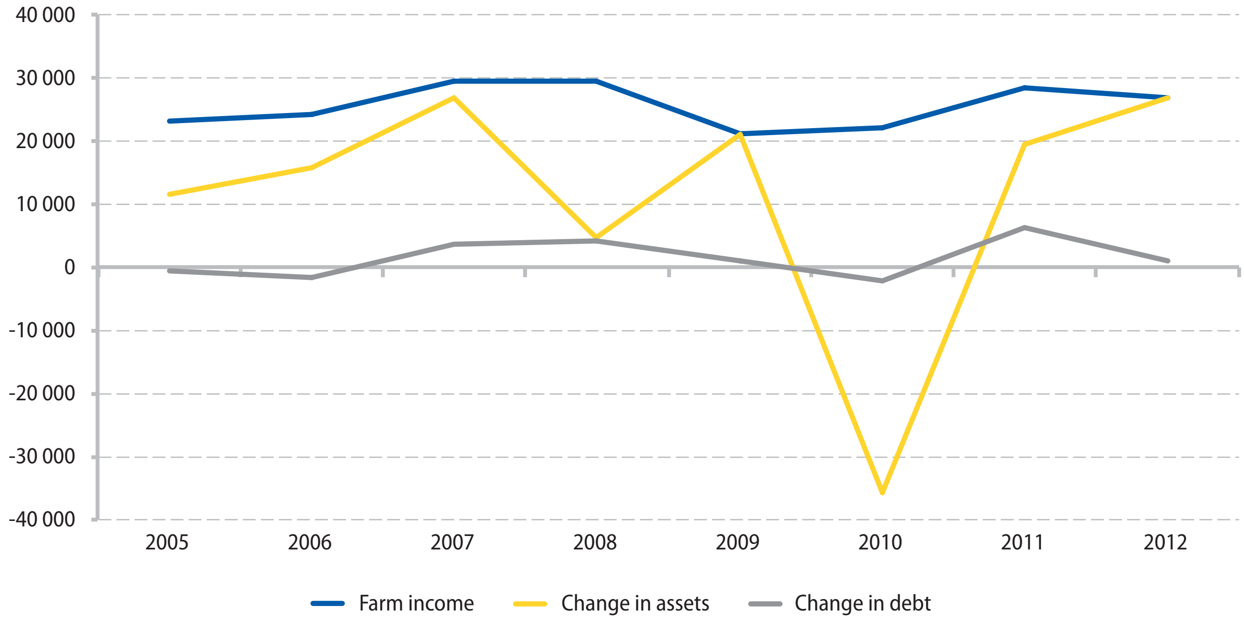
Example 1.3.3

Practical Example: Calculating economic sustainability indicators for three Member States using FADN data

An analysis of Economic Sustainability would show the level and regularity of the cash flow which is of major importance for risk assessment. This can give insight into the viability of demand. Low Economic Sustainability would probably result in a high rejection rate for applicants.

Austria	Total output	Total subsidies – excluding for investments	Total Inputs	Farm income	Total current assets	Total fixed assets	Change in assets	Long & medium-term loans	Short-term loans	Change in debt	Economic Sustainability
2004					70 291	281 067		27 497	8 968		
2005	52 658	19 728	49 467	22 919	79 494	283 521	11 657	25 673	10 023	-769	12 031
2006	54 101	19 372	49 507	23 966	91 214	287 791	15 990	24 836	9 245	-1 615	9 591
2007	66 755	18 438	55 547	29 646	90 697	315 041	26 733	27 315	10 308	3 542	-629
2008	70 760	18 843	59 926	29 677	93 848	316 776	4 886	32 212	9 793	4 382	20 409
2009	60 716	20 469	60 065	21 120	87 889	343 617	20 882	31 227	11 518	740	-502
2010	59 576	18 342	55 849	22 069	84 575	311 216	-35 715	30 112	10 336	-2 297	60 081
2011	71 335	18 318	61 009	28 644	94 235	320 748	19 192	32 805	13 642	5 999	3 453
2012	74 431	18 055	65 474	27 012	95 671	346 038	26 726	35 311	11 937	801	-515

All numbers in EUR. Produced by EUFADN Database 13/05/15 10.40.55

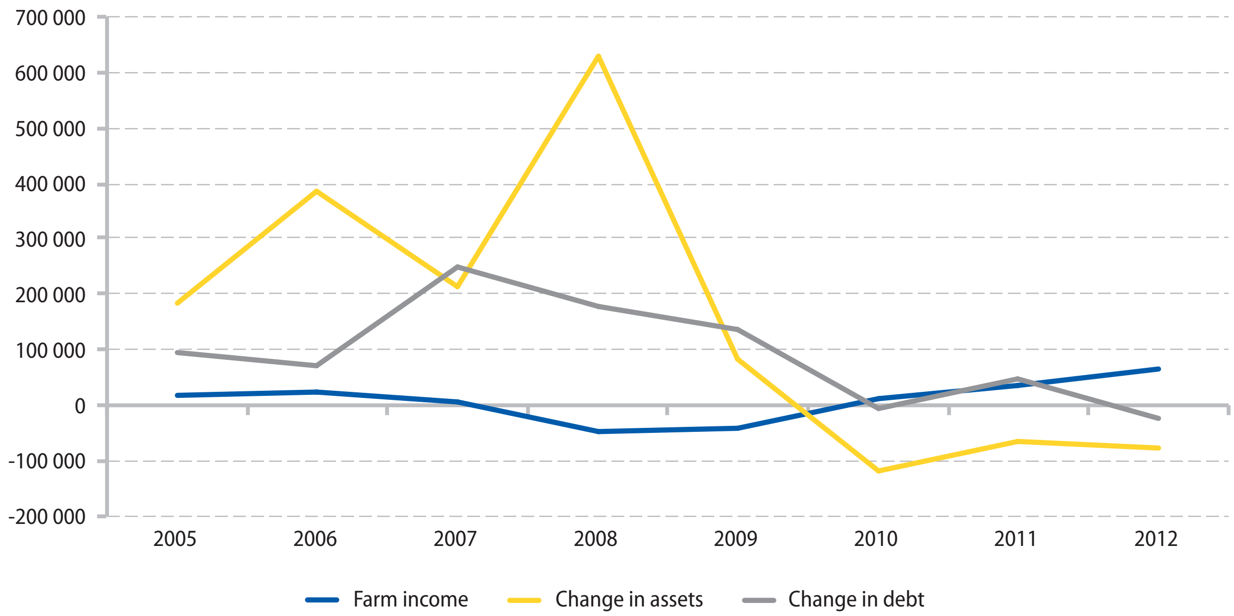


All numbers in EUR.

In Austria, the Economic Sustainability is positive in five out of eight years and the remaining three are only slightly negative. In the positive years, the Economic Sustainability is high, meaning the risk for financial providers may be low over the longer term.

Denmark	Total output	Total subsidies – excluding on investments	Total Inputs	Farm income	Total current assets	Total fixed assets	Change in assets	Long & medium-term loans	Short-term loans	Change in debt	Economic Sustainability
2004					182 330	1 052 728		670 310	46 086		
2005	240 953	29 703	251 460	19 196	218 978	1 197 366	181 286	762 381	52 016	98 001	-260 091
2006	264 303	32 570	272 706	24 167	251 585	1 547 763	383 004	831 994	56 524	74 121	-432 958
2007	321 241	36 441	350 745	6 937	329 259	1 684 313	214 224	1 072 212	64 932	248 626	-455 913
2008	349 973	36 853	435 256	-48 430	326 868	2 317 563	630 859	1 233 326	83 165	179 347	-858 636
2009	328 372	38 193	408 584	-42 019	343 447	2 382 555	81 571	1 382 022	72 654	138 185	-261 775
2010	374 129	35 993	395 660	14 462	352 718	2 255 019	-118 265	1 379 012	70 280	-5 384	138 111
2011	433 740	37 015	435 142	35 613	360 254	2 183 815	-63 668	1 418 651	75 543	44 902	54 379
2012	468 088	36 532	438 902	65 718	369 580	2 098 121	-76 368	1 389 749	80 420	-24 025	166 111

All numbers in EUR, Produced by EUFADN Database 13/05/15 10.40.55

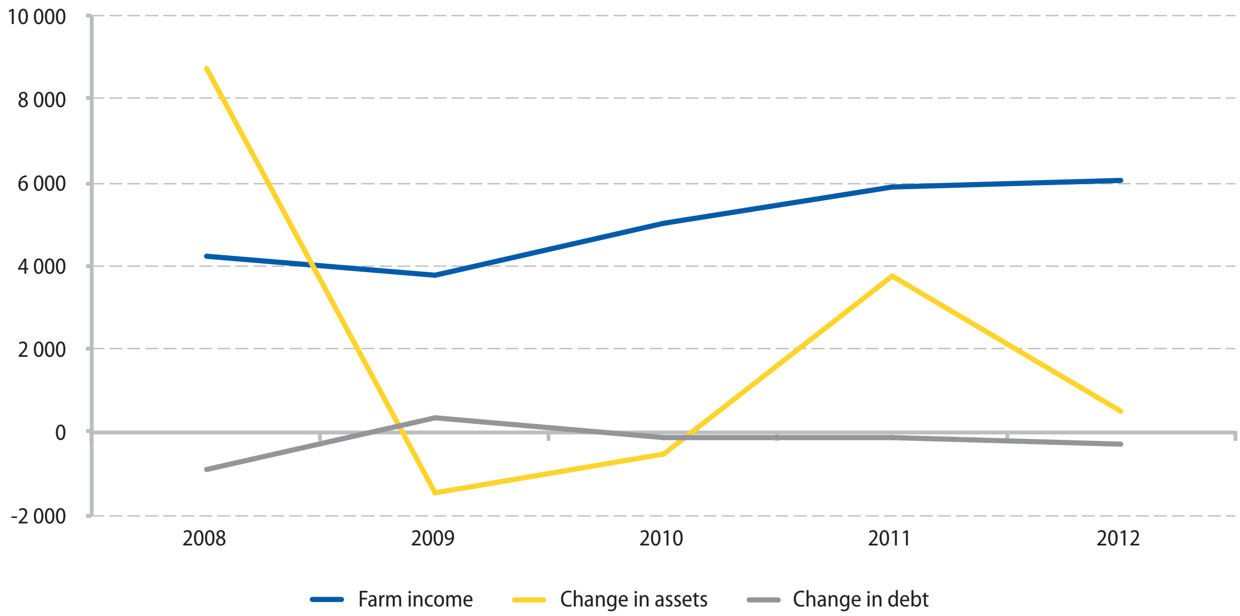


All numbers in EUR.

In Denmark, the Economic Sustainability was highly negative in the first five out of eight years. In 2010, there was a major change in assets for the average Danish farm while farm income increased notably. Still, there may be structural reasons for the long-lasting downturn. Loans might not be provided due to high potential risk.

Romania	Total output	Total subsidies – excluding on investments	Total Inputs	Farm income	Total current assets	Total fixed assets	Change in assets	Long & medium-term loans	Short-term loans	Change in debt	ES
2007[44]					7 736	21 029		1 201	634		0
2008	10 735	1 437	7 963	4 209	7 073	30 405	8 713	608	339	-888	-3 616
2009	10 633	1 694	8 555	3 772	7 349	28 681	-1 448	813	483	349	4 871
2010	12 905	1 535	9 396	5 044	8 631	26 885	-514	750	432	-114	5 672
2011	13 730	1 688	9 504	5 914	10 903	28 351	3 738	461	570	-151	2 327
2012	12 747	1 946	8 685	6 008	11 136	28 621	503	457	284	-290	5 795

All numbers in EUR. Produced by EUFADN Database 13/05/15 10.40.55



All numbers in EUR.

In Romania, the Economic Sustainability is positive in four out of five years. It is however very low in total. This means that financial providers may not be willing to finance larger investments for modernisation, including machinery.

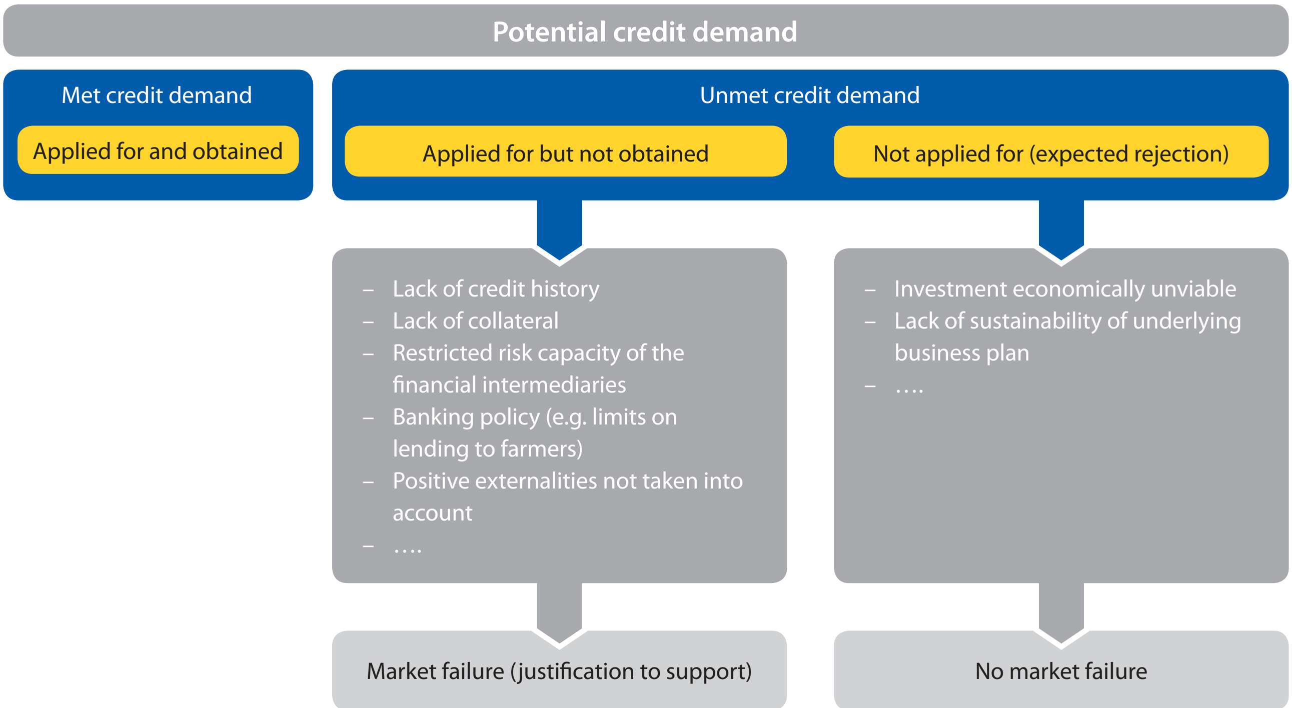
44 2004-2006 data not available from FADN.

1.4 Analysing the gap between supply and demand

1.4.1 Scope

The final step in this first part of the assessment is quantification of the gap between supply and demand, to highlight the amount of funding needed for an FI. Having identified the size of the financing gap, it is necessary to determine whether this financial gap is the result of market failure or other causes such as justifiable rejections for non-viable projects.

Figure 4: Schematic overview of supply and demand for agricultural financing including reasons for market failure



1.4.2 Proposed methodological elements

There are numerous ways of estimating financing gaps. Each of these ways is usually related to the same techniques used in estimating supply and demand (e.g. data stratification, sampling, etc.). The proposition in Box 5 uses a target group survey.

The financing gap can be calculated by multiplying new lending (Step 1.2) by the percentage of unmet demand on total potential demand (step 1.3).

Box 5: Quantification method of the financial gap

Parameters	Potential sources
Financing gap per year = Volume of loans per year * [Total unmet credit demand per year / (Total unmet credit demand per year + Average volume of lending per year)]	 See step 1.2 See step 1.3 See step 1.3 See step 1.3
Financing gap per year caused by market failure = Financing gap per year * Share of unmet credit demand caused by market failure per year	 See above Target group survey[45]

Example 1.4.1

Fictitious Example: Quantifying the financial gap

This example uses the formulas in the boxes in this section. Assuming the volume of annual new lending to agriculture is EUR 1.031 billion (see Example 1.2.4) and this is 80% of potential credit demand (see Example 1.3.1), potential credit demand would be EUR 1.289 billion. The financial gap, whether caused by market failure or not, would be EUR 257 million per year (of this 2/3 rejections and 1/3 lack of applications).

Parameters (partly from survey questions)	EUR Billion	% of total potential credit demand
Volume of loans per year	1.03	80%
Total potential credit demand per year	1.29	100%
Total unmet credit demand per year	0.26	20%
Rejections	*0.17*	
Lack of applications	*0.086*	

Another way of calculating from the survey results in Example 1.3.1 shows how a target group survey can be used to quantify the unmet credit demand, which during the previous three years was EUR 4.6 million for the 1 000 sample farms. Projected to cover all 168 270 farms, this would mean a potential unmet credit volume of EUR 257.8 million per year ([EUR 4.6 million/3 years/1 000 sample farms] * 168 270 farms).

45 Example question (also see survey example in the Annex): Why did your organisation NOT OBTAIN the loan(s) you applied for?

Having identified the financing gap, it is necessary to determine whether this is the result of market failure or is due to other causes. The ex-ante assessment has to analyse the reasons for credit rejections or loan refusals as reported in the target group survey and check with market experts. This should highlight the applications rejected due to insufficient financial viability which cannot be considered as a market failure[46].

Example 1.4.2

Fictitious Example: Assessing whether the financial gap is a result of market failure

Survey responses to 'The financier did not lend money because the investment was considered economically unviable' and 'The financier did not lend money because the underlying business plan was not adequate' indicate no market failure. In this case, the market failure gap would fall by 28% (which is a sum of 17% and 11% from the list of answers below) from EUR 257.8 million to EUR 185.6 million p.a.

Reasons for application rejection (partly from survey questions)	%
A. Lack of credit history	24%
B. Lack of collateral	30%
C. Investment risks too high	12%
D. Banking policy (e.g. limits on lending to farmers)	6%
E. Economically unviable	17%
F. Inadequate business plan[47]	11%
Applications not considered market failure (E+F)	28%

Sample = 1 000 farms

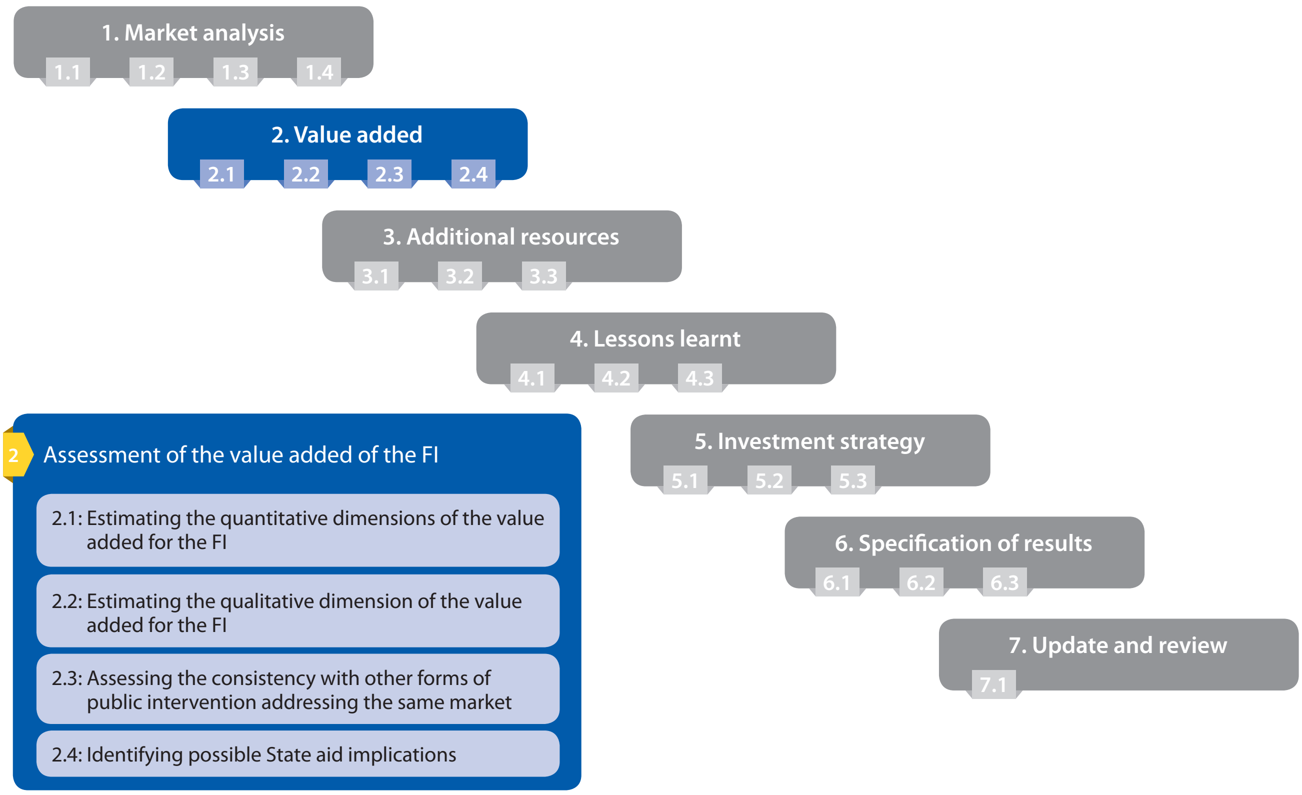
46 'Economically unviable' or 'inadequate business plans' are not automatically a sign of inexistent market failure: What for one bank could be financially viable, might be unviable for another. Different investment criteria apply for different lenders or equity providers.

47 There may be scope to address some of these dismissed cases. For example, the low quality of business plans may be explained by insufficient knowledge of how such plans should be developed. This on its own may trigger grant support under the EAFRD for advisory services, or technical support within the FI to ensure that quality levels are reached.

2. ASSESSMENT OF THE VALUE ADDED OF THE FI

After analysing market failures or suboptimal investment situations that justify public intervention, the ex-ante assessment has to analyse the value added of an FI. This could be completed in four steps:

Figure 5: Steps for assessing the value added of the FI, following CPR, Article 37(2)(b)



When assessing the value added of an FI, the following questions should be answered:

- What is the quantitative and qualitative value added of an FI for financing agricultural activities compared to a grant or other type of public intervention? (Steps 2.1 and 2.2)
- What other forms of public intervention address the same market? What measures are taken to address overlapping and conflicting intervention? (Step 2.3)
- Does the proposed aid fall under State aid, and therefore need to be notified to the Commission?

2.1 Estimating the quantitative value added of an FI

2.1.1 Scope

The ex-ante assessment will need to review the value added of the FI over any other instrument, for instance a grant. This means that the quantitative alternative options should be compared[48]. The main quantitative additional values of FIs relate to their revolving nature with the recycling of funds and their leverage effect in attracting additional public and/or private capital.

2.1.2 Proposed methodological elements

A wide array of modelling and forecasting methods for the quantification of the value added of FIs can be used. The following indicators, as for modelling and forecasting, can also be used for reporting and monitoring obligations:

- the multiplier ratio (guarantee only),
- the leverage effect,
- the revolving effect.

National practices and regulations may lead to the identification of further options. These should be explored and evaluated.

Multiplier ratio (guarantee only)

According to the Commission Delegated Regulation (EU) No 480/2014, Article 8, '*the multiplier ratio shall be established through a prudent ex-ante risk assessment for the specific guarantee product to be offered, taking into account the specific market conditions, the investment strategy of the financial instrument, and the principles of economy and efficiency*'.

In the same Article, the multiplier effect of a guarantee is defined as the ratio of total amount of new loans disbursed to final recipients to the corresponding programme resources allocated to cover expected and unexpected losses from such loans, which may be calculated as:

Box 6: Calculation of the multiplier ratio of a guarantee supported by an FI

Multiplier ratio of a guarantee fund

=

Total amount of new loans disbursed to final recipients

/

Programme resources allocated to the guarantee fund to cover expected and unexpected losses

48 There is however no legal obligation to quantify specific value added indicators except for the leverage effect, see Step 3.

Example 2.1.1

Fictitious Example: Establishing the appropriate multiplier ratio of a guarantee fund

A proposed investment strategy for a fund guarantees €1 billion of loans up to 80% of each loan and with a cap of 25% at the portfolio level for losses. The maximum liability under the capped guarantee is calculated as the product of (i) the total portfolio volume, (ii) the guarantee rate and the (iii) the guarantee cap rate.

For this example, the capped amount is €1 billion (total portfolio volume) x 0.8 (guarantee rate) x 0.25 (cap rate), that is €200 million. In other words, this capped amount, plus expected management costs and fees related to the instrument will be set aside from the RDP resources as the maximum liability of the managing authority for the guarantee instrument. The ratio between the programme resources allocated to cover expected and unexpected losses to be covered by guarantees and the total amount of new loans disbursed to final recipients is the multiplier. The multiplier for this example is 1 000/200= 5. So, in this example, the loans induced by a guarantee fund under EAFRD are five times higher than the RDP resources allocated.

Changes in the parameters express differences in the perceived risk of default on an individual loan versus a default on the whole portfolio. To illustrate the effect of changing risk parameters, we may imagine a second case in which the guarantee rate per loan remains at 80% but the guarantee cap rate is lowered to 10%. In this case the default risk on the total portfolio for the specific guarantee product is lower than in the first example. As a result the capped amount decreases from €200 million to €80 million, and the multiplier increases to 12.5.

A third case can be imagined in which the guarantee rate on a loan to loan basis covers only 50% of the loan. However, the guarantee cap rate, as the expression of the agreement of guarantor and recipient of the guarantee for risk that the former is available to take spread over the whole portfolio is 16%. As a result, the multiplier ratio and the capped amount remains unchanged.

In '000s	Case 1	Case 2	Case 3
Total portfolio volume	€1 000	€1 000	€1 000
Guarantee rate	80%	80%	50%
Guarantee Cap Rate	25%	10%	16%
Capped amount	€200	€80	€80
Multiplier ratio	5	12.5	12.5

Leverage effect

The leverage effect in the context of the Financial Regulation[49] is defined as the amount available to eligible final recipients divided by the amount of the Union contribution. It is calculated in nominal terms, taking into account all contributions to the final recipient (excluding financing from the final recipient) and focussing on the first cycle of investment. The higher the leverage, the higher the value added (for methods, see Chapter 3 for explanation)[50].

49 According to Article 140 of the Financial Regulation and Article 223 of its Rules of Application 'Financial instruments shall aim at achieving a leverage effect of the Union contribution by mobilising a global investment exceeding the size of the Union contribution. The leverage effect of Union funds shall be equal to the amount of finance to eligible final recipients divided by the amount of the Union contribution'.

50 More information on leverage can be found in a Commission guidance note about reporting on financial instruments that is foreseen to be published in the next months and will be available on the following web page: http://ec.europa.eu/regional_policy/en/information/legislation/guidance/

It is important to distinguish the leverage effect from the revolving effect when borrowers repay the loans and these funds can be reinvested in new projects.

The revolving effect

FI resources have a revolving effect, which substantially differentiate them from grants. The major revolving principle stems from the opportunity that funds used once to support a final recipient can be reused when paid back. On the contrary, a traditional grant is available to a single beneficiary (or group of beneficiaries) and establishes a unidirectional flow of funds.

The higher the revolving effect, the higher the added value of the FI will be. But different types of FIs show a different revolving character and this has to be weighed up against other factors. A guarantee fund may have a lower revolving effect than a loan (as funds are released only on repayment of the capital) while at the same time show a higher multiplier and more leverage.

Specific revolving effect of guarantees: The revolving effect of a guarantee is seen in the cycle of commitment and decommitment of eligible expenditures covered by the guarantee. This means that as loans under the guarantee fund are repaid, the corresponding programme resources allocated to cover losses from these loans will be released. According to Article 44 of Regulation 1303/2013, these funds have to be recommitted to the same FI, creating a revolving character for the fund. The extent of the revolving effect of the guarantee also depends on the risk taken by the guarantee fund. As repayment of loan capital under the guarantee has to be ensured, the revolving effect may be slower than for a loan fund if the guarantee is not released progressively with amortisation of the loans.

Specific revolving effect of loans: For loan funds, the revolving effect kicks in as soon as loans (or parts of the loan) are repaid and lent again. The capital can be lent multiple times (recycling). Revolving effects for loan funds can be illustrated by calculating the net present values of incoming cash flows including capital and interest payments (also see Chapter 5 on the design of the proposed investment strategy). These depend on the period under observation (investment cycles).

Net present value

'Calculating the present value of the difference between the costs and the benefits provides the ***Net Present Value*** *of a policy option. Where such a policy or project generates a positive Net Present Value there would be no obvious reason to prevent it from proceeding so long as the distribution of costs and benefits among different social groups is deemed to be acceptable and all costs and benefits are included in the computation (which is often methodologically challenging).*

A social discount rate is used to convert all costs and benefits to 'present values' so that they can be compared. This discount rate is a correction factor applied to costs and benefits expressed in constant prices. ***The recommended social discount rate is 4%.*** *This 4% rate is in real terms and is applied to costs and benefits expressed in constant prices. It can be easily adjusted for inflation: if instead you are dealing with nominal prices, and inflation is, say, 3% per annum then a 7 % nominal social discount rate (4% rate plus 3% to account for inflation) would be used.'*

Source: Tool 54: The use of discount rates, European Commission Guidelines, http://ec.europa.eu/smart-regulation/guidelines/tool_54_en.htm, last update: 19/05/2015

There is no single method to calculate the revolving effect. One possibility may be discounting and aggregating the resources flowing back to the FI.

Example 2.1.2

Fictitious Example: Revolving effect of a loan by discounting and aggregating resources flowing back to FI

We assume a fixed rate loan from the EAFRD co-financed financial instrument of €30 000, a maturity of 10 years and a proportional capital repayment rate of 10% p.a. (€3 000) and a discount rate, for the net present value, of 4% p.a. The revolving effect (the potential reinvestment) would be € 25 305.99 plus interest payments and eventual management fees, minus management costs.

Year	Debt value	Repayment	Present value of the potential reinvestment
0	30 000.00		
1	27 000.00	3 000.00	3 000.00
2	24 000.00	3 000.00	2 884.62
3	21 000.00	3 000.00	2 773.67
4	18 000.00	3 000.00	2 666.99
5	15 000.00	3 000.00	2 564.41
6	12 000.00	3 000.00	2 465.78
7	9 000.00	3 000.00	2 370.94
8	6 000.00	3 000.00	2 279.75
9	3 000.00	3 000.00	2 192.07
10	0.00	3 000.00	2 107.76
		30 000.00	**25 305.99**

Discount rate: 4% p.a.

2.2 Estimating the qualitative value added for FIs

2.2.1 Scope

In addition to the quantitative dimension, FIs may have a qualitative value added' that should be explored. For example, the introduction of an FI could:

- address the market gap while minimising market distortion;
- create an innovative offer that has not been provided previously, such as a microcredit for farm diversification;
- support the building or strengthening of certain entities that the market would not otherwise trust, such as particular producer groups, European Innovation Partnership (EIP) groups, or clusters;
- offer chances for new entrants to the sector that the market would not otherwise trust, such as young farmers;
- help overcome specific regional or sectoral market failures such as:

- high liabilities of agricultural entrepreneurs from high land prices can mean that collateral is not available for innovative investments (for instance horticulture innovation in the Netherlands, for an example see Step 5 on the proposed investment strategy);
- subsectors such as wine, liquors, or permanent crops, with unusually delayed return on investment might have problems with initial repayments;

- attract additional sources of expertise and know-how (e.g. venture capital, business angels);
- support capacity building and promote the development of a business mentality by ensuring funds are used for value added, revenue producing and self-sustaining projects.

Cross Ref. Section 5

2.2.2 Proposed methodological elements

Analysis of the qualitative value added of the FI should include information from Step 1 of the ex-ante assessment (e.g. access to private financing markets). The methodology would include regional and/or sectoral specifics.

Cross Ref. Section 1

The selection of FI has to take into account both the quantitative and qualitative dimensions. The selection will depend on the weight given by the managing authority to these different elements which can be evaluated with:

- value-benefit analysis,
- cost–utility analysis,
- triangulation of quantitative and qualitative results.

All these considerations should be evaluated in the conclusions according to Article 37(2) of the CPR. The assessment of the value added has to be fed into the proposed investment strategy (see Step 5 on the design of the proposed investment strategy). As mentioned in the introduction, this may be part of an iterative process including rechecking the value added during formulation of the investment strategy.

Cross Ref. Section 5

2.3 Assessing consistency with other forms of public intervention addressing the same market

2.3.1 Scope

This section presents steps to review consistency with other forms of public intervention in the agricultural sector or subsectors under study. These steps to review consistency may be supported by the supply analysis.

The concept of consistency relates to 'horizontal' interactions between the FI and RDP measures, agriculture related activities of other ESIF such as investments in renewable energy and energy saving[51] as well as national agriculture policy instruments and strategies.

Cross Ref. Section 1.2

Different forms of public intervention, each with their own objectives, shall work in a complementary manner, supporting the interventions of others, so that:

- synergies are exploited;
- added value is created and;
- conflicting or counterproductive activities are avoided.

51 See Article 20/1b EAFRD Reg. 1305/2013.

2.3.2 Proposed methodological elements

The assessment must:

see Annex 2.4

1. identify areas of complementarity with other forms of public intervention;
2. elaborate on measures to minimise market distortions created by overlapping forms of public intervention, such as support through an FI within the RDP and any nationally/regionally implemented FI or similar instrument without EU co-financing.

In addition to reading the relevant documents, talking to stakeholders implementing agricultural and business development policy instruments can provide valuable evidence.

Box 7: Example interview questions for assessing consistency with other forms of public intervention

- What are the scope and objectives of the public intervention?
- What sector is supported (agricultural holdings, rural economy or business in general)?
- What type of recipients are eligible?
- What stage of business development is supported (founder, start-up or mature)?
- What types of projects get financed (assets, working capital, innovation or other)?
- Is the public intervention restricted to businesses in a certain location?
- What volumes are eligible?
- What is the financial product?

It may be impossible to completely eliminate all overlaps. In this case the assessment should provide an explanation as well as a description of the measures taken to minimise them. As overlaps imply the duplication of work, these measures taken should have the aim of reducing administrative costs for managing authorities, and lowering the bureaucratic burden for final recipients.

Some forms of combined public interventions will deliberately exploit synergies between FIs or between FIs and grants (see Article 37(7) of the CPR).

2.4 Identifying State aid implications

2.4.1 Scope

Managing authorities should identify when and under what conditions an FI falls under State aid and when it needs to be notified to the Commission.

Agricultural activities fall under the scope of Article 42 of the Treaty on the Functioning of the European Union (TFEU) and concern products listed in Annex I of the Treaty.

EAFRD Regulation stipulates that for activities supported under the EAFRD[52], State aid rules do not apply to co-financing payments or to additional national financing ('top-ups').[53] Aid for these activities is exempted from the notification requirement of Article 108(3) of the Treaty provided it complies with the respective compatibility conditions laid down in the EAFRD Regulation. Therefore, the amounts and support rates as defined in Annex II of the Regulation should be respected.

Article 38(3) of the CPR explicitly mentions FIs complying with standard terms and conditions, laid down by the Commission. These off-the-shelf FIs are further defined in Commission Implementing Regulation (EU) 964/2014[54] (see Step 5 on the investment strategy). These FIs do not have to be notified to the Commission as their terms and conditions have been developed to make them State aid compliant. However, for off-the-shelf FIs that may be considered applicable or as a source of inspiration for an EAFRD FI, the support rates and amounts defined in Annex II of the EAFRD Regulation apply.

52 Article 81 and 82 of REGULATION (EU) No 1305/2013.

53 Article 211(2) of Regulation (EU) No 1308/2013.

54 Regulation (EU) No 964/2014.

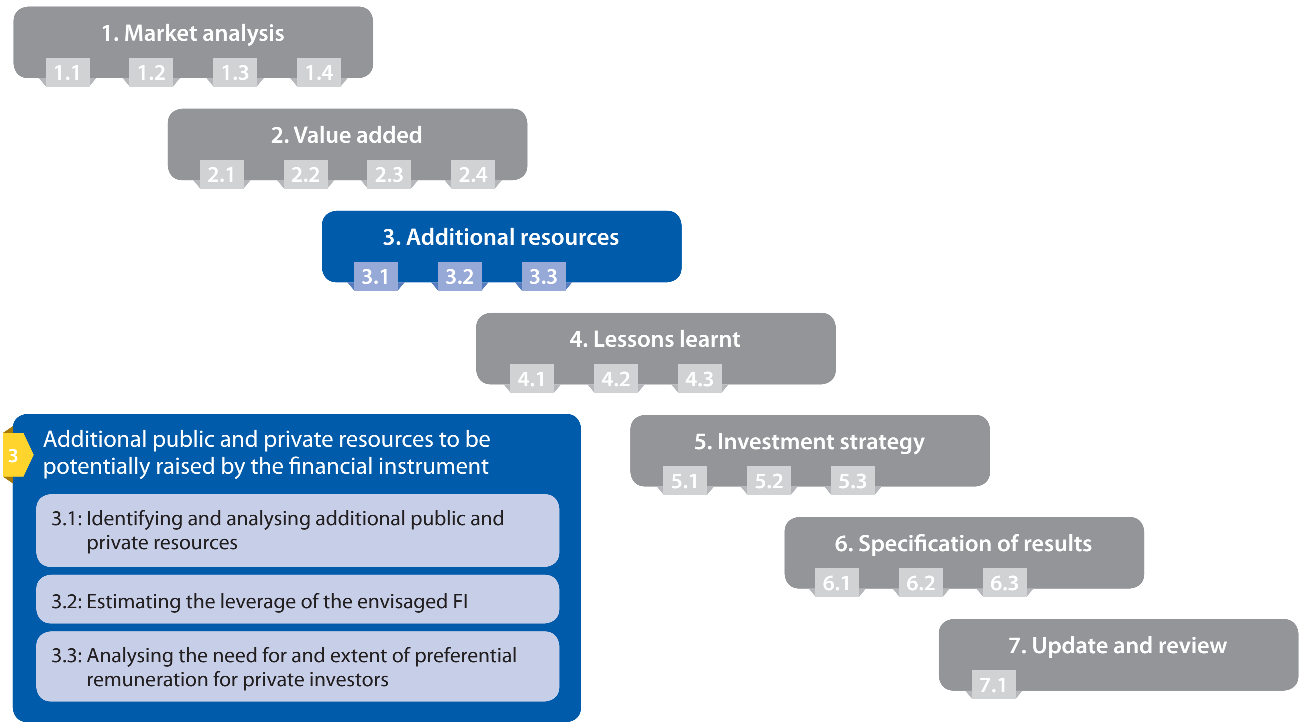
3. ADDITIONAL PUBLIC AND PRIVATE RESOURCES TO BE POTENTIALLY RAISED BY THE FI

One aim of FIs is to attract private co-investment and additional public funding. This is particularly relevant with public budget constraints and involves risk-sharing provisions for potential private investors.

From new investment funds to accelerator programs and crowd funding platforms, private and (semi-) public food and agriculture funding sources are now booming around the globe. Around forty new funding options have been reported over the past two years.[55] Even if many of these activities are concentrated in the US, emerging economies and developing countries, this trend is also accelerating in Europe.

This section is closely connected to the value added assessment and should be conducted in three steps:

Figure 6: Steps for identifying additional public and private resources raised, following CPR, Article 37(2)(c)



55 Food + Tech Connect (2015): 42 New Food Tech & Agtech Funding Opportunities Launch in 2014. Available from: http://www.foodtechconnect.com (July 2015).

When identifying and quantifying the public and private resources to be potentially raised, the following questions should be asked:

- What is the structure and volume of national co-financing? What institutions (e.g. commercial banks, agencies, private investors, etc.) could co-invest in the FI? (Step 3.1)
- At what level and when should there be additional contributions? How should the managing authority require the provision of additional contributions? (Step 3.1)
- What is the amount of the additional public and private resources that can be leveraged? (Step 3.2)
- Is preferential remuneration needed for (attracting) private investors? To what extent? (Step 3.3)

3.1 Identifying and analysing additional public and private resources

3.1.1 Scope

To get a clear picture of the additional public and private resources that could be raised by an EAFRD FI, managing authorities have to take into account that such resources:

- can be raised at the level of the final recipient[56];
- can be raised at the fund, or fund of funds levels;
- can be considered as national co-financing of the Programme under certain conditions;
- can be financial or in-kind contributions, such development land as part of the investment[57].

It should be noted that additional resources which constitute national co-financing of an RDP can be provided until the end of the eligibility period (31 December 2023[58]). Article 59(4)(c) and (d) of the EAFRD Regulation provide that the maximum EAFRD contribution can be increased by 10% for FIs managed by, or under the responsibility of, the managing authority and up to 100% for contributions to an EU level FI.

As already noted in the section on added value, any contribution by the final recipient is not considered as a national public or private contribution to the RDP. Cross Ref. Section 2.1

The assessment should take into account that private (and public) contributions may be added over the lifetime of the FI.

3.1.2 Proposed methodological elements

Two main issues should be identified in this step:

- potential sources of additional resources and their aims;
- the level of additional resources.

56 As provided for in Article 38(9) of the CPR.
57 As provided for in Article 37(10) of the CPR.
58 Article 65(2) of the CPR.

Potential sources and their aims

Cross Ref. Section 1.2

An overview of the main actors providing finance to the agricultural sector helps identify the types of intervention to which they would make additional contributions. The actors should have already been identified during the supply analysis phase, as part of the market assessment in Step 1.

National co-financing for EAFRD contributions is an additional resource.

Public or semi-public contributions beyond the national co-financing requirement might come from:

- national or regional public funds for agriculture or SMEs;
- regional or local funds for rural development;
- institutions (e.g. banks, agencies, etc.), including those that manage (farmers') pension funds;
- other social security institutions assessing insurance contributions;
- forestry funds.

Private financing could come from financial institutions interested in the scope of the FI, its investment strategy or in a specific project financed by the FI. In many European countries cooperation may be activated through:

- cooperative and/or agricultural banks;
- credit unions;
- farmers' associations;
- producers' cooperatives;
- machinery syndicates/contractors;
- non-traditional sources, such as equity providers.

It is important to identify dedicated funds including:

- funds investing in technology such as technical upgrades in the food supply chain, including aggregation; storage or distribution, value added processing or marketing, information technology;
- funds investing in sustainability of food, conversion to organic farming, healthy food, or bio energy;
- funds investing in food sectors with specific produce or groups of produce, often in cooperation with retailers/ restaurants.

Additional funding sources may also differ by sub-sector. As the sectoral organisation is very different from country to country (or region to region), this is subject to national research. Examples of investors who may be attracted to invest in the FI or final recipients include:

- dairies and cheese retailers may be interested in financing dairy farms and dairy processing facilities specifically;
- sectors such as dairy, fruit and wine may have fewer intermediaries but these finance producers;
- cereal seeds and fertiliser companies may provide finance (e.g. to large cereal producers).

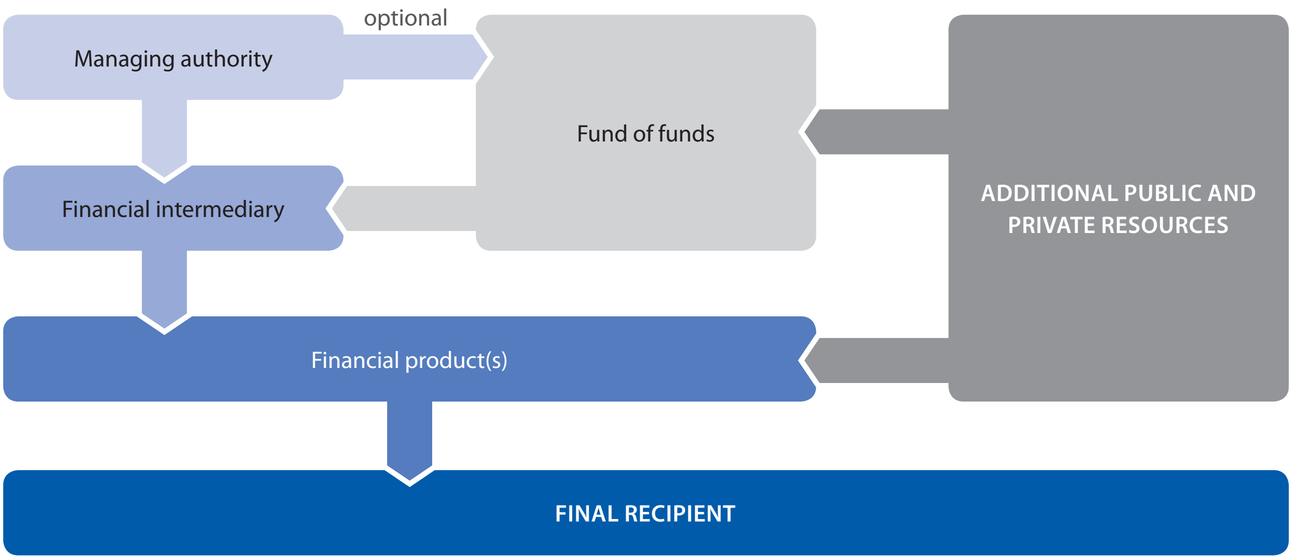
For most sectors, there may be financing from producers of agricultural machinery. This implies that national and regional specifics of the possible private contributions will have to be identified during the market analysis phase within Step 1.

The level for co-financing an EAFRD programme

EAFRD co-financing cannot include contributions at the final recipient level. The Public Expenditure principle used to determine the level of co-financing obligations excludes this possibility for EAFRD (contrary to the Total Expenditure principle which may be used for other ESIF supported programmes). National, regional or private co-financing should be at the fund, fund of funds or financial intermediary levels.

Managing authorities need to define at which level sources can co-invest. This depends very much on the design of the FIs. For instance, sub-sector specific investors could contribute at the fund level. If managing authorities plan more general FIs targeting the sector as a whole, integration in the fund of funds would be possible. The ex-ante assessment has to confirm that the expected co-investment at different levels is realistic and should additionally provide ranges of the potential contributions.

Figure 7: Levels for which additional resources can be acquired



3.2 Estimating the expected leverage of the FI

3.2.1 Scope

The ability to attract additional resources is a key characteristic of financial instruments and one of the main arguments for promoting their use to deliver ESI Funds policy objectives.

Cross Ref. Section 2.1

3.2.2 Proposed methodological elements

The concept of leverage covers more than just national co-financing. Calculation of the leverage effect is clearly defined in the Rules of Application in Article 223 of the Rules of Application to which the CPR refers, so the leverage is '*equal to the amount of finance to eligible final recipients divided by the amount of the Union contribution*'[59]. For the calculation of leverage:

- contributions from the final recipient are not included;
- the face value of the expenditure is counted irrespective of the financial nature (e.g. repayable or non-repayable);
- any investment cycles beyond the first cycle are not included.

Box 8: Calculation of the expected leverage of FIs

Expected leverage effect =	Method
Total expected amount of finance to eligible final recipients	[(1) EAFRD funds contribution to the financial instrument*; (2) the expected national co-financing (public or private); (3) the expected contribution by other investors; (4) interest and other gains expected to be generated from treasury management (Article 43 CPR) Minus Management costs and fees expected to be paid for running the financial instrument]
Divided by	
EAFRD funds committed to the financial instrument	EAFRD funds committed to the financial instrument

There is a wide range of leverage across financial products, sectors and countries. Usually, guarantees have the highest leverage as little capital is injected. In addition, leverage could also vary between types of investment (for example, low for research and innovation and other high risk investments), between regions (in richer regions the private sector is often more likely to co-invest), and between the development stages of final recipients (seed and start-up capital are more risky as compared to expansion investment).

3.3 Analysing preferential remuneration for private investors

3.3.1 Scope

The standard approach to remuneration implies that private and public investors share exactly the same risks and rewards, *pari passu*, to comply with State aid regulations. As part of the ex-ante assessment of EAFRD FI schemes, preferential remuneration schemes require specific justification and assessment. In the 2014-2020 programming

59 More information on leverage can be found in a Commission guidance note about reporting on financial instruments that is foreseen to be published in the next months and will be available from: http://ec.europa.eu/regional_policy/en/information/legislation/guidance/

period, preferential remuneration was extended to include repaid debt capital.[60] As a consequence, managing authorities could consider:

- asymmetric profit sharing, with a hurdle rate[61] giving preference to the private partners;
- preferential fee payment to managers within limits established by the Commission Delegated Regulation (EU) No 480/2014;
- preferential exit regime;
- asymmetric loss sharing, for instance if the managing authority decides to cover the first loss risk of an agricultural loan.

The framework of the General Block Exemption Regulation[62] may help the managing authority to facilitate State aid procedures for a preferential remuneration scheme.

3.3.2 Proposed methodological elements

To evaluate the preferential remuneration required to attract private investors, managing authorities should review existing experience. A comprehensive study of preferential remuneration could define:

- the main investment criteria for private investors, particularly for profit expectation and risk propensity;
- a hierarchy of preferential schemes according to their impact on competition and market distortion; and
- the measures to mitigate downside risks for the EU contribution as part of the governance of the FI.

The main indicators are related to risk propensity so analysis should include:

- the targeted sector, as different agricultural sectors have different risk profiles;
- diversification of the fund across agricultural sectors and regions;[63]
- diversification of the fund by the number and size of loans, as risk tends to be higher for a portfolio dominated by a few large loans than for many small loans;
- investor experience of the target market;
- position in the life cycle of the products or companies (e.g. SMEs from inception up to the growth phase).

Assessing the need for preferential remuneration can include[64]:

- estimating the profit (or loss) and risk of the FI;
- detailing expectations of private partners, taking into account the size of their contribution and the distribution of profit and risk;

60 Please refer in addition to Article 37(2) '*The preferential remuneration shall not exceed what is necessary to create the incentives for attracting private counterpart resources and shall not over-compensate private investors, or public investors operating under the market economy principle. The alignment of interest shall be ensured through an appropriate sharing of risk and profit […]*' Article 44(1) of Regulation (EU) No 1303/2013 and Commission Delegated Regulation No 480/2014 Article 6(1)(d). Such remuneration schemes must be compatible with State aid rules.

61 The minimum rate of return on an investment required by an investor. In order to compensate for risk, the riskier the investment, the higher the hurdle rate.

62 General Block Exemption Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty.

63 Often regional diversification is not deemed possible for a regional instrument. However, there are cases where a national or even EU-wide product could be considered.

64 See EC/EIB (2014c): Ex-ante assessment methodology for financial instruments in the 2014-2020 programming period. Enhancing the competitiveness of SME, including agriculture, microcredit and fisheries (Volume 3), p. 74.

- based on these considerations, it is possible to estimate the amount of support needed to attract private investors including:
  - the difference between the expected return of the FI and the fair rate of return (FRR) for private investors[65]; and
  - the rate of return to compensate for the risk.

The ex-ante assessment should estimate a reasonable rate of return which could serve as a starting point for a competitive assessment (e.g. call for expression of interest) to select private investors.

Compensation via asymmetric profit sharing would be expensive if the sector is considered by lenders as highly risky. In such cases, a risk reduction (asymmetric loss protection) for private investors could be evaluated. If the losses are lower than a pre-defined ceiling, they are covered by the public budget (first loss buffer). If they are higher, the excess is either shared equally between the private and the public investor or follows another pre-agreed rule.[66]

The ex-ante assessment should give a reasonable range for these values. An asymmetric first loss may not be completely covered by the General Block Exemption Regulation. As already discussed, a 25% first loss is foreseen in the General Block Exemption Regulation for SME risk instruments, however, for instance, UK authorities report the need for up to 50% first loss for their venture capital regional markets, which are among the most developed in Europe.[67,68]

65 The FRR is applied in several decisions of DG Competition. It is understood as a risk adjusted rate of return that is comparable with other opportunities in the market segment for the type of investment. It is determined by the risk profile of the investment. The managing authority has to assess what could be considered as FRR according to market data. Where no market data are available or the market is very limited, the FRR could be determined by an independent expert through analysis of industrial benchmarks and market risk.

66 Note Commission Delegated Regulation 480/2014 Article 6(2).

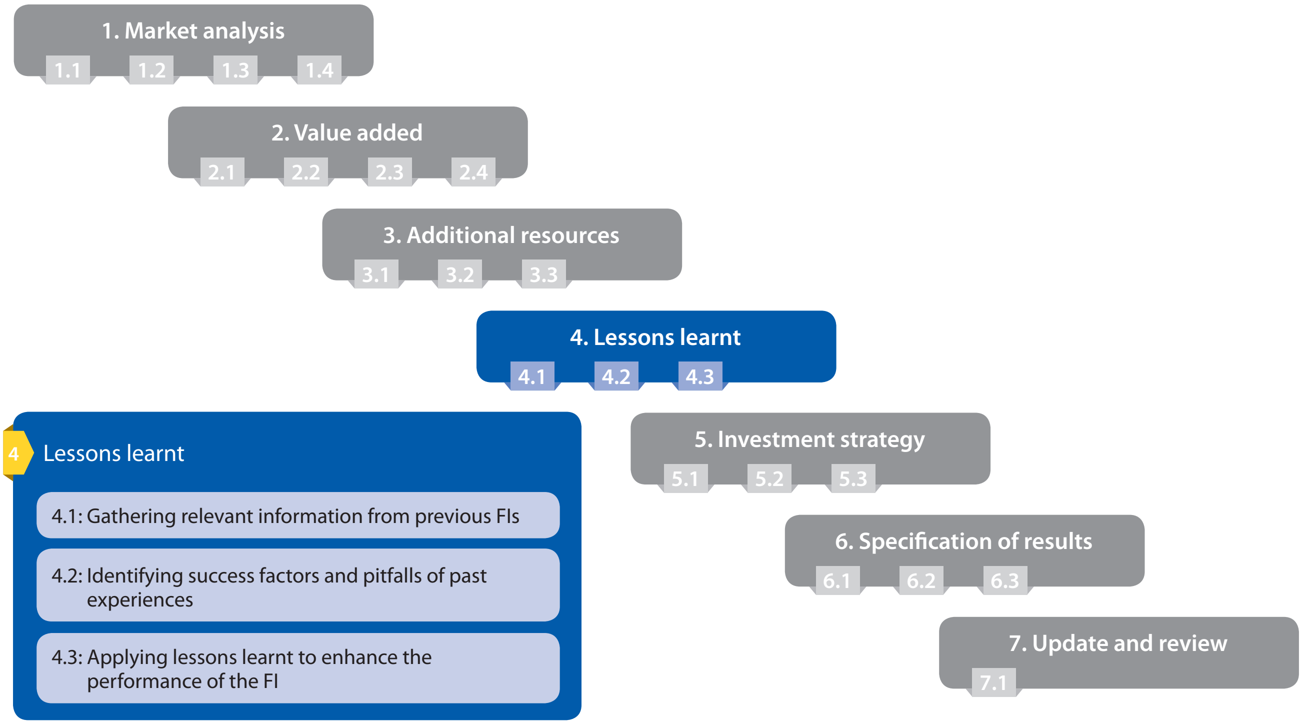
67 Response of the UK to the public consultation of the draft EU guidelines on State aid to promote risk finance investments, September 2013.

68 See EC/EIB (2014c): Ex-ante assessment methodology for financial instruments in the 2014-2020 programming period. Enhancing the competitiveness of SME, including agriculture, microcredit and fisheries (Volume 3), p. 74.

4. LESSONS LEARNT

This part of the ex-ante assessment comprises the following steps:

Figure 8: Steps for Lessons Learnt, following CPR, Article 37(2)(d)



To identify and make use of experience from previous FI activities, the ex-ante assessment must include an analysis of lessons learnt from comparable instruments and assessments. Additionally, the ex-ante assessment should include a description of how these lessons will be incorporated in the FI. Together with the assessment steps presented so far, managing authorities should appraise the fit for financial products.

When identifying the lessons learnt, the following questions should be answered:

- Step 4.1
  - What past experience should be considered when setting up an FI?
  - Are there specifics for carrying out the ex-ante assessment and in setting up and implementing FIs?

- Step 4.2
  - What are the success factors and pitfalls of past experience?

- Step 4.3
  - How could these lessons be taken into account when setting up the FI to maximise its success?

4.1 Gathering information from previous FIs

4.1.1 Scope

The scope of this sub-step is to review the lessons learnt, existing comparable instruments and their background, as well as objectives and organisational structure.

4.1.2 Proposed methodological elements

The main information or data to be collected on past experience are[69]:

- economic and political context for agriculture in the region or country;
- objectives of the FI, its target market, and the financial product;
- eligible final recipients, implementing bodies;
- organisational structure of the FI;
- preferential remuneration for private investors;
- performance against expected results: successful disbursement, quality of support to final recipient (returns on investment: income and capital repaid), contribution of the FI to programme and priority objectives;
- key success factors and main obstacles (resource constraints, administrative issues, availability of project pipeline).

Past experience of implementing FIs under the EAFRD is limited when compared to FIs using structural funds or other ESI funds. Under the EAFRD and for agriculture, FIs were first applied in the 2000-06 programming period and extended during 2007-13 in France, Bulgaria, Estonia, Italy, Romania, Latvia and Lithuania. These were loan and guarantee funds[70], but no venture capital funds were set up. Therefore, the overall experience of implementing EAFRD FI is limited.

see Annex 2.2
see Annex 2.4

If no relevant FIs have been implemented so far, the managing authority may look at the experience of similar public or semi-public interventions, sometimes provided by national or regional authorities and sometimes by public banking institutes or social security institutions. Data on the financing provided and disbursed is useful.

69 See EC/EIB (2014b): Ex-ante assessment methodology for financial instruments in the 2014-2020 programming period (Volume 1), p. 77.

70 An assessment on the success of FIs in rural development in the former programming period is available in a report from the European Court of Auditors from 2015: European Court of Auditors (2015): Are financial instruments a successful and promising tool in the rural development area? Special Report No 5, 2015. Available from: http://www.eca.europa.eu/en/pages/DocItem.aspx?did=31658

Example 4.1.1

Practical Example: How Germany used past experience

The Federal Ministry of Food and Agriculture commissioned a study '*to analyse whether so-called new financial instruments are suitable for co-financing of the Joint Task for the Improvement of Agricultural Structures and Coastal Protection*'. There are no FIs funded by the EAFRD in Germany, so the authors of the study evaluated the use of FIs funded by the ERDF, with an in-depth literature review and expert interviews. Based on their findings and knowledge of EAFRD, it was possible to draw some conclusions.

Desk research and a literature review to identify examples of FI implementation in the region or similar regions is the starting point. To get a good overview of the different questions and aspects to be considered, a pre-defined analysis grid can help ensure standardised collection and analysis (e.g. 4.1.2).

see Annex 2.2

see Annex 2.4

Example 4.1.2

Our example of a standardised literature analysis grid summarises examples of FI implementation as well as information on the economic, agricultural and political context. Furthermore, detailed information on administration as well as the main obstacles and success factors can be identified.

Exemplary analysis grid for standardised literature analysis

Region	FI type or Fund
Economic context	*Baseline analysis*
Agricultural context per sub-sector	
Political context	
FI type	
Ex- ante assessment findings	*if conducted*
Fund	
FI objectives	
FI implemented in which measure(s), under which axis of the EAFRD (programming period 2007-14)	
Implementing bodies	
Organisational structure	*Governance of the FI within the RDP*
Final recipients	
Main aspects for private partners	*e.g. preferential remuneration, attractive return on investment,...*
Performance	*Returns on investment/FI contribution to programme objective/achievement of targets*
FI specific performance (indicators and methods of measurement)	*Multiplier (guarantees), leverage, revolving effect*
Success factors	*If possible: differentiation by stage of the life cycle*
Main obstacles	*Internal* *External*
Main sources	*Literature* *Telephone interviews* *Evaluations*
Contact details	*Managing authority/financial intermediaries/final recipients, ex-ante assessors (if conducted)*

The desk research and review could be complemented by consultation with stakeholders who previously participated in FIs. Consulting and learning from experience (although substantial legal aspects have changed for the current programming period) is relevant. Experience of managing authority staff members, implementing bodies, final recipients/project managers and independent consultants who performed mid-term and ex-post evaluations may be considered. Consultations can include, for example, surveys, focus groups and workshops:

see Annex 2.4

- questionnaires can illustrate the experiences of managing authorities or financial institutions and can depict the status quo of the (former) programming period;
- focus groups and workshops can gather the experiences of other stakeholders as well as the general details of FIs from other programmes, which is input for Steps 4.2. and 4.3, examples can be important for the RDP as well as for design and implementation of the FI.

4.2 Identifying success factors and pitfalls from past experience

At the end of this section the managing authority should have an impression of how to use experience in each step of the FI life cycle.

4.2.1 Scope

The ex-ante assessment should use these experiences to identify key success factors and pitfalls for each step of the FI life cycle (design, set-up, implementation and winding-up). Experience from comparable instruments (e.g. at national level, also without EU contributions) may provide useful information.

4.2.2 Proposed methodological elements

see Annex 2.4

Desk research and interviews with managing authorities and implementing bodies are another method to gather information which may not be available in official documents.

Both the literature review and interviews may consider[71]:

- assumptions made during the design phase of the past FI or similar instrument, for the market assessment, expected added value, private sector participation;
- governance and structural provisions in the set-up and implementation phases: involvement of stakeholders, governance rules, governance experience with multi-RDP or multi-fund structures, implementing bodies, legal structure, etc. (see also Step 5);
- administrative resource capacity in dealing with administrative procedures, experience and competence of the main actors, technical support, reporting tools and IT systems;
- management costs and fees, and other efficiency considerations;
- the investment strategy (see also Step 5);
- monitoring and control, result and disbursement indicators with contribution to RDP objectives, plus any other monitoring tools (see also Step 6);
- any experience of winding-up an FI during the last period – e.g. released and ongoing guarantees, use of resources returned after the final eligibility date;
- EU Programmes and instruments set up at EU level with preconditions and other considerations;
- banks or other investors which participated in such instruments could be consulted.

71 See EC/EIB (2014b): Ex-ante assessment methodology for financial instruments in the 2014-2020 programming period, (Volume 1), p. 78.

4.3 Applying lessons learnt to enhance the performance of the FI

4.3.1 Scope

Mechanisms to foster positive aspects and stem negative effects on the performance of the FI (e.g. risk mitigation) need to be reviewed.

4.3.2 Proposed methodological elements

A SWOT analysis provides a formal way of identifying and documenting the Strengths and Weaknesses, and of examining the Opportunities and Threats that arise from different options. The SWOT analysis is a basic, straightforward model that supports decision making using a clear template to display pros and cons at a glance. This may help to improve FI design and enhance its performance. see Annex 2.4

- Potential results from combining the internal strengths of a region with the external opportunities. Existing potential such as a high share of organic farming in the area could be combined with increased demand for organic products in the EU.
- Potential results from combining the internal weaknesses of a region with external opportunities. A low level of agricultural research could benefit from innovation funding from the RDP.
- Barriers from combining the internal weaknesses of a region with the external threats. A lack of public-private partnership in grazing livestock could combine with an increase in price volatility and income fluctuation. These are really tough challenges and hard to overcome.
- Barriers resulting from combining the internal strengths of a region with external threats. An increase in price volatility and income fluctuation can be challenged by using the internal strength of the region, such as a high share of organic farming. Negative external developments can be turned around by using regional strengths.

Based on this analysis and the lessons learnt, the managing authority can enhance implementation. It is important to remember that some elements of the SWOT analysis refer to lessons learnt in the market assessment (see Chapter 1) of building block I, while other elements relate to building block II, delivery and management of the FI (see following Chapters 5, 6 and 7). Cross Ref. Section 5
Cross Ref. Section 7

Example 4.3.1

Figure 9: Schematic illustration SWOT analysis

	STRENGTHS	WEAKNESSES
OPPORTUNITIES	**Existing potentials** Success factors identified in past experience that exist and can be exploited in the country/ region or target market for the FI combined with factors that may exert a positive influence on the success of the FI	**Possible potentials** Factors determining a pitfall or representing obstacles in past experiences and can be found in the country/ region or target market for the FI combined with factors that may exert a positive influence on the success of the FI
THREATS	**Possible barriers** Factors that could potentially reduce the performance of the FI, but are not placed under exclusive control of the managing authority, i.e. external factors combined with success factors identified in past experience	**Existing barriers** Factors that could potentially reduce the performance of the FI, but are not placed under exclusive control of the managing authority, i.e. external factors combined with factors determining a pitfall or representing obstacles in past experiences

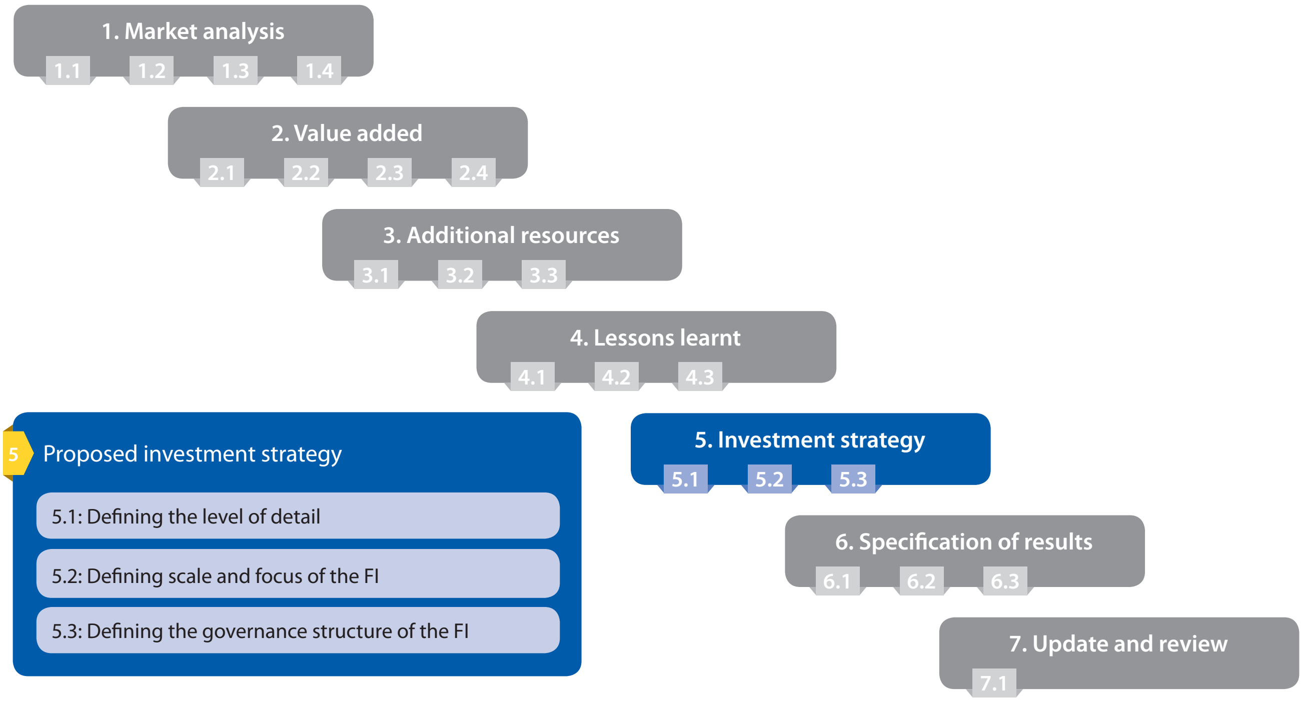
Based on EC/EIB, 2014c: 80, modified content and illustration.

BUILDING BLOCK 2:
DELIVERY AND MANAGEMENT

5. PROPOSED INVESTMENT STRATEGY

This chapter guides the reader through steps to elaborate a proposed investment strategy:

Figure 10: Steps for Lessons Learnt, following CPR, Article 37 (2) (e)



The previous chapters of this handbook equipped readers with the necessary basis for the proposed investment strategy. Assessing this strategy means drawing conclusions from the analyses to select and structure the most appropriate FI.

As noted in Chapter 3, FIs implemented under EAFRD require an investment strategy that is closely aligned with the objectives under the priorities and focus areas, the eligibility rules under measures, the expenditure related provisions, co-financing elements, and monitoring and reporting requirements defined in the RDP. The proposed investment strategy may help to '*[…] justify the choice, the combination and the prioritisation of rural development measures in the light also of the results of the SWOT analysis and the needs identified and linked to the measures concerned (respectively the beneficiaries under these measures or eligible operations), together with the financial allocations according to the interventions.*'[72] If FIs are not programmed in the RDP, introducing them will require a modification of the RDP. A recent amendment of the Implementing act allows managing authorities to submit unlimited modifications related to an

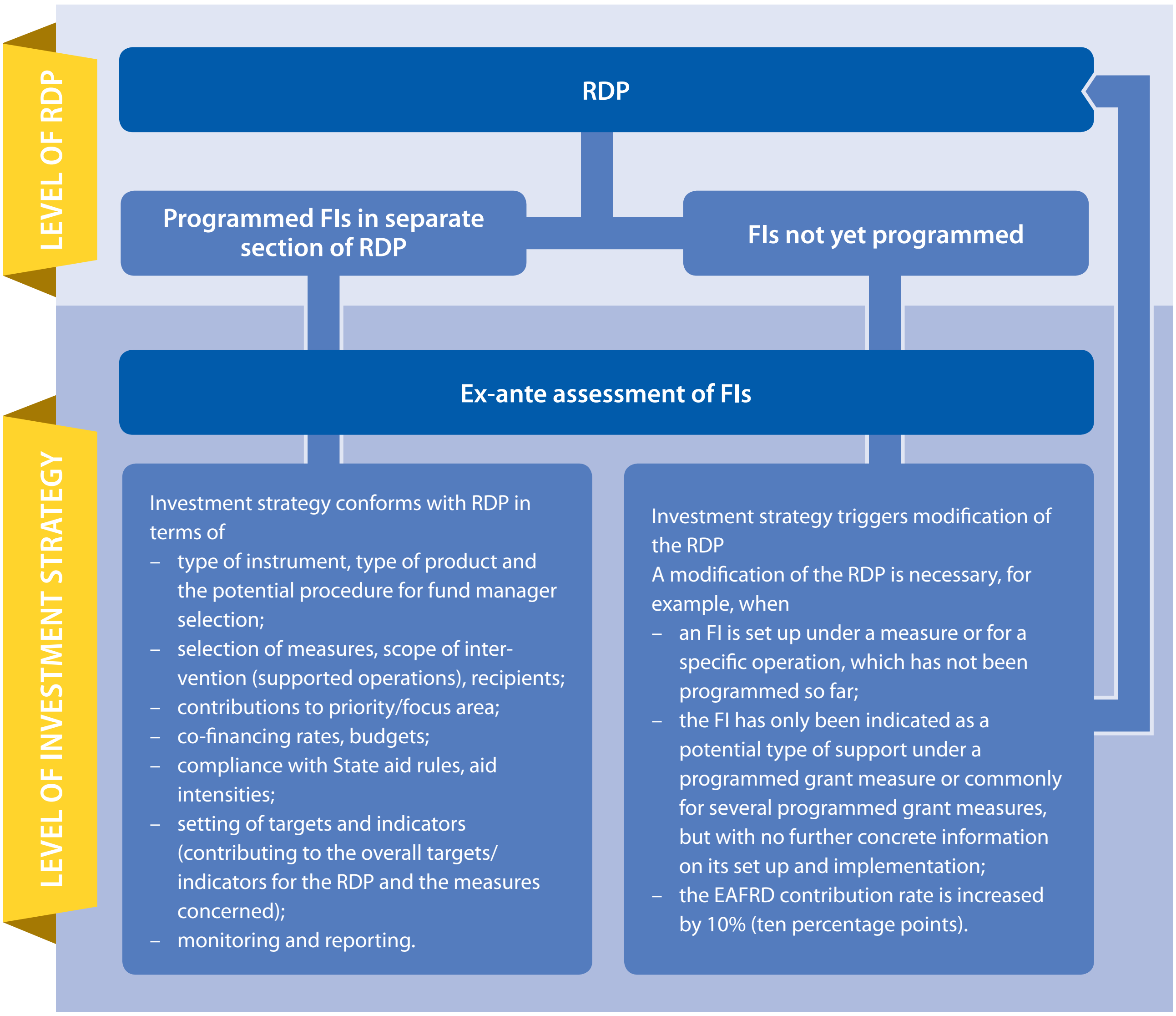
72 European Commission Working Paper: Elements of strategic programming for the period 2014-2020.

FI (the rest are limited to one per year). The required information on the FI is also reduced and limited to the major programming elements.

Since the proposed investment strategy will form part of the basis for negotiating the funding agreement, managing authorities should consider the implications of different approaches to the proposed investment strategy in the ex-ante assessment, taking two extremes:

- A very detailed approach, for example, specifying product terms and conditions. The managing authorities should be prepared to consider updating the ex-ante assessment, especially if funding agreement negotiations highlight different parameters. This can occur as either a market situation evolves after the market assessment and before funding agreement negotiations are completed, or market sensitive information only emerges during funding agreement negotiation.
- A framework approach, offering higher level detail. The managing authorities may find that this approach gives flexibility during funding agreement negotiations. Such higher level detail will widen possibilities – although possibly not all positive – during negotiation of the funding agreement and will require a different negotiation strategy from the managing authority to ensure adequate focus is maintained.

Figure 11: Relationship between RDP and FI implementation



Evaluation of a proposed investment strategy should answer a series of questions.

- Step 5.1
  – Does the target market fit into the priorities and focus areas defined in the ex-ante evaluation of the RDP, in terms of geography and theme?
  – How does the FI address the needs identified in the RDP?

- Step 5.2
  – Which FIs are most suitable to address the market gap or sub-optimal investment situation, considering value added, potential co-financing and lessons learnt in a given sub-sector?
  – What is the geographical scale for the FI (national/regional, cross-border, transnational)?
  – How can the FI address the market segments, including the conditions, scope, eligibility and selection criteria and final recipients in subsectors?

- Step 5.3
  – What choices of governance settings and implementation options are available?

5.1 Defining the level of detail

5.1.1 Scope

The proposed investment strategy specifies the target final recipients. FIs can be developed for the whole agricultural sector, for all potential EAFRD agricultural recipients, for a specific type of investment by farmers, per agricultural sub-sector, or for other specific criteria. In doing so, managing authorities should ensure consistency with Chapters 1 and 2 of the ex-ante assessment[73], and with the objectives under priorities, focus areas and measures of the RDP.

Eventually, consistency should be reflected in the funding agreements[74]. In practice, this means that any funding agreement between the managing authority and the financial intermediary including the eligibility rules underlying the financial intermediary's final recipient selection process, must meet the RDP eligibility criteria.

5.1.2 Proposed methodological elements

Consistency check of the FI with the strategic priorities of the RDP

The following questions should be considered to ensure consistency between the RDP and the proposed investment strategy.

- How does the FI fit into the intervention logic?
- How does the FI address the needs identified in the RDP?
- What is the expected contribution of the FI to RDP targets?
- How does the FI and other forms of support (i.e. grants) work together to achieve the objectives?
- What eligibility rules need to be respected by the FI?[75]

73 From Chapter 1 and 2 of this ex-ante assessment, managing authorities know to what extent the target market for an FI may fit priorities defined in the ex-ante evaluation of the RDP.

74 Projects funded under EAFRD are evaluated against specific selection principles, defined in the RDP and included in the funding agreements.

75 Implementation provisions may need to be modified if they are burdensome for commercial banks.

- What other inconsistencies are there between the proposed investment strategy and the RDP?
- What modifications to the existing RDP may be necessary (as shown in Figure 11 at the beginning of this chapter)?

5.2 Defining the scale and focus of the FI

The ex-ante assessment needs to:

- identify the most appropriate financial product to address the market needs and segments;
- check and adapt the financial product to address the market segments and identify and select target final recipients in line with the eligibility of the RDP.

5.2.1 Scope

Select the most appropriate financial product

The identification of gaps in specific segments of the market will directly affect the FI. For example, the amount of credit shortage in a region gives an approximation of the size, scale and focus of the potential FI.[76]

Following the CPR, financial products that can support projects in agriculture are guarantees, loans or equity. However, each product has specific characteristics, responds to different needs and its suitability depends on each particular case.

If a group of FIs has been identified in the analysis under Chapter 2, managing authorities can select the most appropriate financial product. The assessment of value added may have already shown a clear preference for one particular financial product. Managing authorities can decide to provide only one type of financial product or several types, but are advised to limit the product offering to simplify the FI set-up.[77]

This sub-step analyses financial products, outlining advantages and disadvantages for target final recipients. Combining the different elements of the ex-ante assessment with the features of financial products should guide the design process for the FI.

Check and adapt the FI to address the market segments in more detail and identify and select final recipients (in line with the eligibility of the RDP)

Once the choice of financial products has been made, managing authorities check and adapt these products to address the market segments in more detail. That may mean forecasting a range of interest rates, guarantee fees, collateral, duration, grace periods, premiums for voluntary repayment or waivers of availability fees.

Managing authorities are advised to maintain a reasonable level of flexibility in the proposed investment strategy. Making an informed decision on the investment strategy can be particularly challenging, especially for up to eight years (i.e. the current eligibility period, running until 31 December 2023).[78]

76 EC/EIB (2014c): Ex-ante assessment methodology for financial instruments in the 2014-2020 programming period (Volume 1), p. 44.

77 Later on, the ex-ante assessment may be revised to evaluate other options, depending on the economic situation in the programme area.

78 For equity funds, the CPR allows for a longer eligibility period.

Flexibility means leaving room in the funding agreements for potential market or sector changes, for instance by forecasting a range of leverage[79]. Managing authorities should ensure that the range satisfies the minimum required for efficient public intervention in the market. At the same time, they should be sufficiently prudent in defining the range, to ensure a successful round of offers and minimum delay for disbursement.

In identifying reasonably broad eligibility and selection criteria in line with the RDP, the proposed investment strategy could provide synergies covering different sized holdings and a broad range of product types across different agricultural subsectors. Clear and straightforward eligibility rules simplify the work of bodies implementing FIs, and simplify audits of activities.

When the proposed investment strategy foresees the use of guarantees, a specific ex-ante risk assessment for guarantees should assess the multiplier rate. This is not formally part of the ex-ante assessment, though it could be.

At the end of this section the managing authority should be able to determine the scale, focus and market segments of the FI. The target sub-sectors and types of holdings for final recipients should be defined.

5.2.2 Proposed methodological elements

Select the most appropriate financial product

see Annex 2.4

An analysis of the advantages and disadvantages of different financial products should include the acceptable level of risk, reward and ownership.

The *fi-compass* publication on FI products presents an overview of the key features of loans, guarantees, equity and quasi-equity as well as examples of their application[80]. This should serve as a rough guide in the selection of financial products. Appointing specialised advisors can help decision makers understand the risks, assess the benefits and estimate the 'whole life' costs and benefits of a financial product.

Of the possible loan, guarantee and equity financial products offered by the CPR, it should be noted that while loans and guarantee products are relatively common offerings across the EU, equity has not been used extensively in the EU agricultural context.[81] Characteristics such as the small size and the non-corporate structure of many farms preclude funding sources such as issuances, or trading and risk pricing of equity in public markets.[82] The preclusion of traded equity finance applies even for larger scale corporate farms operating mainly in New Member States of the European Union due to the lack of necessary institutions supporting equity markets.

The following infographic shows key considerations influencing the selection of financial products. This process is also closely linked to Step 5.3 (defining the governance structure of the FI).

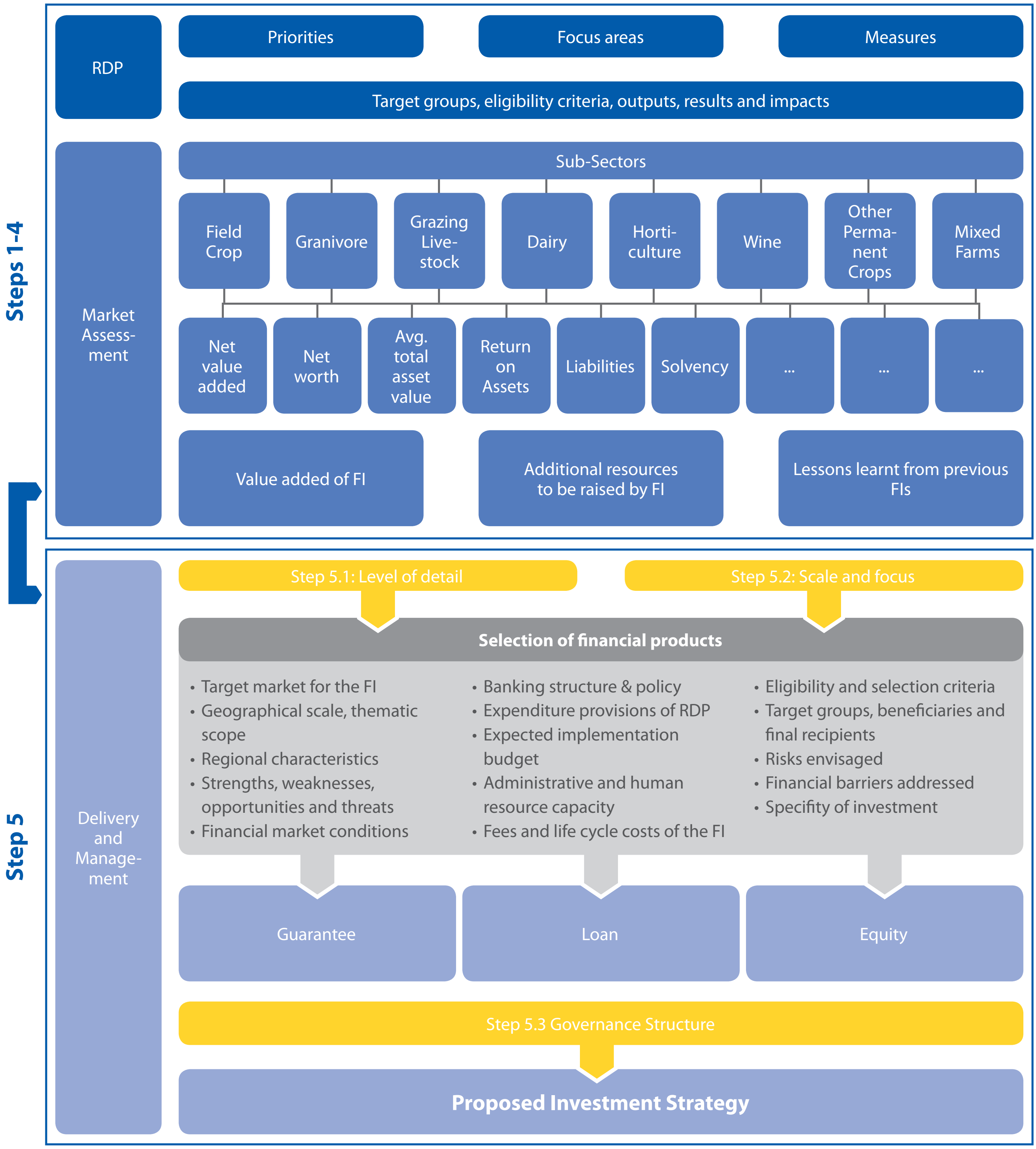
79 The analysis of existing support schemes in Chapter 2 of the ex-ante may result in a leverage of 3, but the leverage in the funding agreement could range between 2 and 5.

80 https://www.fi-compass.eu/sites/default/files/publications/ESIF-factsheet-FI-products.pdf

81 This may also be due to the rather complex market analysis that needs to be performed, which requires specialized knowledge of the consultant carrying out the ex-ante assessment.

82 There are large differences between Member States in farm sizes and governance (corporate) structures, farming tradition and length of farm-financier relationships, functioning of land markets, as well as legal and institutional environments securing contract enforceability or the protection of property rights and minority shareholders.

Figure 12: Considerations for the proposed investment strategy



Managing authorities can tailor financial instruments or use ‘off-the-shelf’ instruments with terms and conditions provided by the European Commission. The proposed investment strategy should help clarify which type of instrument best addresses the needs.

Box 9: Off-the-shelf instruments applicable to the EAFRD

In accordance with Article 38(3)(a) of the CPR, the managing authority can use standard terms and conditions for off-the-shelf FIs to facilitate implementation. The European Commission has defined 'model' templates in Commission implementing Regulation (EU) No 964/2014. The ones relevant for the EAFRD are:

Risk Sharing Loan: this is set up with contributions from the EAFRD programme and additional resources of the financial intermediary to finance a portfolio of newly originated loans. The ESIF programme contribution and the additional resources provided by the financial intermediary bear, at any time, the losses and benefits in proportion to their contributions (pro-rata).

Capped guarantee portfolio: this provides credit risk protection in the form of a first loss portfolio capped guarantee which reduces the barriers that SMEs face in accessing finance. It leverages EAFRD funds to support SME financing.

A Co-investment facility[83] is foreseen to be added to the list of available model templates under the Commission Implementing Regulation (EU) No 964/2014, offering standard terms and conditions for a financial instrument to invest in the equity of SMEs with the contributions of the EAFRD. The objectives of the instrument are: (i) investing in SMEs at seed, start-up, and expansion stage or for the realisation of new projects, penetration of new markets or new developments by existing enterprises through co-investment agreements (partnership approach) with co-investors on a deal by deal basis; (ii) providing more capital to increase investment volumes for SMEs.

Source: fi-compass, Financial instruments factsheet, 2015

Check and adapt the FI to address the market segments and identify and select final recipients in line with the eligibility of the RDP

Table 2: Some major elements of scale and focus for an FI

Scope of the FI
Eligible expenditure • Maximum eligible investments • Characteristics of the FI: e.g. guarantee for a loan in a specific market segment • Eligibility according to objectives of the RDP: new and integrated business and farming systems; the development of new market and chain concepts • Relationship to existing FIs
Eligibility and selection criteria • Sector and size of the company • Submission of all the required documents: e.g. prerequisite of a detailed business plan • Principles for the assessment of the selection criteria: e.g. assessment of applications for investments in innovations by an expert panel
Final recipients • Sub-sectors targeted • Final recipients targeted (e.g. SMEs in their start-up phases, firms with growth potential, firms that are developing and expanding as well as general business activity) • Size and maturity of target financial product

83 Regulation (EU) No 964/2014, as amended by an implementing regulation to be published in the following months, discipline two more instruments not applicable to EAFRD support: (i) Loan for energy efficiency and renewable energies in the residential building sector; (ii) Urban development fund.

Set-up of the FI
- Envisaged implementation budget
- Expected number of applications/year
- Expected risks of the FI: e.g. default risk of guarantees
- Handling of liabilities
- Fees, premiums, commissions e.g. waiver of availability fees, premiums for early repayment
- Forecast range of interest rates
- Evaluation of collateral
- Maximum maturity of the financial products

As referred to in Step 2.1 for guarantees, the ratio between the programme resources set aside to cover losses on loans and the total loans disbursed to final recipients (the multiplier) has to be established.

Cross Ref. Section 2.1

Example 5.2.1

Practical example on scale and focus of the FI from the Netherlands: Guarantees to launch Market Innovations (GMI)

Lessons learnt, gathering information from previous FIs

In the Netherlands there are three guarantee schemes from which experiences can be drawn.

Types of financial products

- Guarantee scheme for Agriculture and Horticulture (GL);
- Guarantee scheme for sustainable Agriculture and Horticulture (GL+): A minimum of 50% of the investment has to be sustainable and environmentally friendly. The requirements of the certification (e.g. Green Label Greenhouse GLK; Yardstick for Sustainable Livestock MDV) are determined by SMK (Eco Foundation) in collaboration with producer and retail organisations, the Dutch government, scientists and consumer and environmental organisations;
- Guarantee scheme for innovation in SMEs (BMKB).

Objectives of the FI, its target market and eligible final recipients

The government supports investments in (young) farmers improving production processes (e.g. reducing production costs, increasing quality of products) by issuing guarantees at the conclusion of an additional loan. Target groups are the small- and medium-sized primary agriculture and horticulture companies with growth prospects but a lack of collateral, successors and 'followers' in the innovation process. The maximum amount of additional investment covered by the guarantee is EUR 600 000 in the GL scheme, and EUR 2.5 million in the GL+ scheme.

Implementing bodies and performance against expected results

The GL used around 50% of the guarantee, while GL+ was lower at about 20% (see table). The average amount granted by the guarantee is around EUR 400 000 in GL and about EUR 1 million in GL+. The number of rejections is very limited.

Table 3: Available budget and allocation for Guarantees Agriculture Plus, 2007-2014

	2007	2008	2009	2010	2011	2012	2013	2014
Guarantee budget (EUR million)	45	55	60	80	80	80	80	80
Granted amount (EUR million)	52	20	14	15	24	23	18	12
Guarantee Amount (80% of amount issued)	42	16	11	12	19	19	14	-
Utilisation of the guarantee amount (%)	92	29	18	15	24	23	18	-
Number of applications	48	18	13	16	22	27	19	9
Number of rejections	0	1	0	1	1	1	0	1

Source: Auditdienst Rijk (2014).

Lessons learnt

The existing Agricultural Loan Guarantee Fund was less suitable to stimulate additional innovation, because of large investments and greater risk. In both schemes the entrepreneurs are jointly and severally liable for any losses. Investments in innovation had a separate arrangement but with the same type of guarantee for all entrepreneurs in agriculture and horticulture. Joint and several liability inhibits innovation and therefore the specific provisions of GL/GL+ are not included in GMI.

The guarantee should be up to 80% of the loan. The length of the guarantee will depend heavily on the amount of funding. Liability is excluded for up to 5 years and further investment by the government is fully hedged from risk of market failure. After this, the same conditions as the agriculture plus scheme apply.

Planned FI under EAFRD: GMI

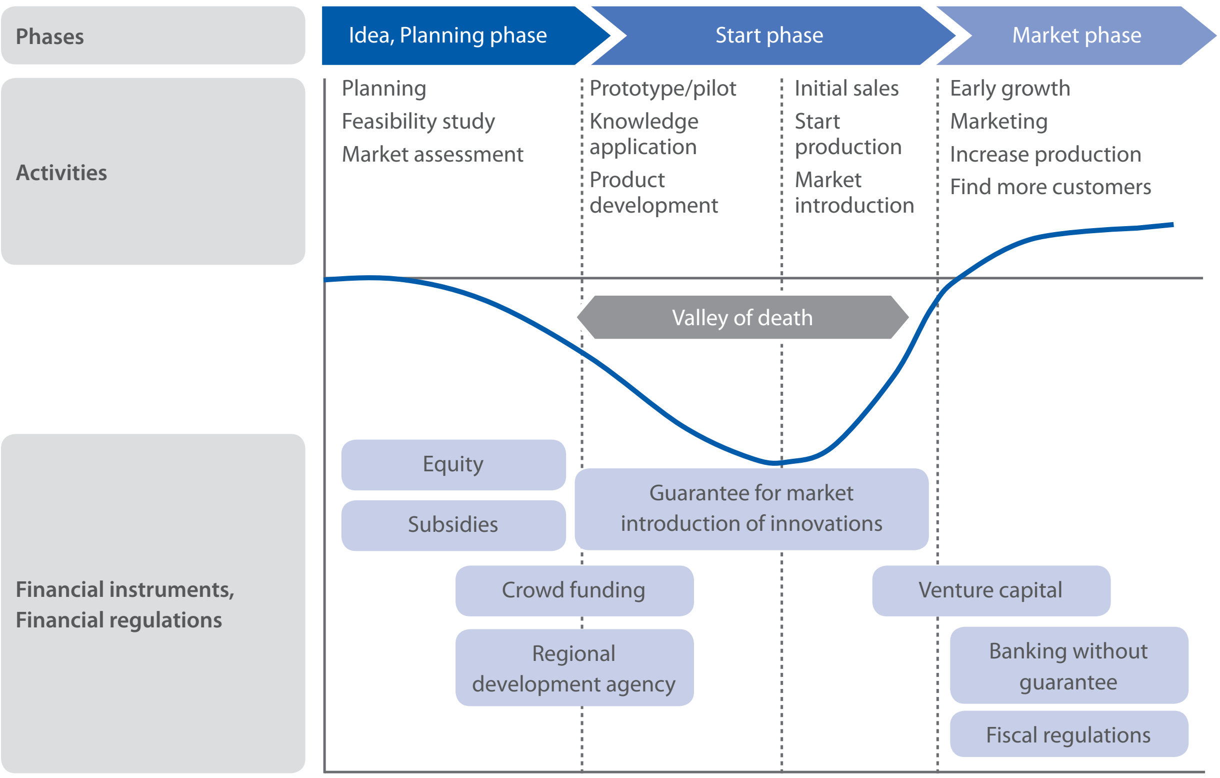
GMI addresses shortcomings of the current instruments for financing market innovation in agriculture and horticulture. The current subsidies and FIs are particularly suited to support the development of prototypes through subsidies, or the roll out of a promising innovation through FIs. Especially when scaling up prototypes for market launch, financial risks are high. Banks will not finance small farmers and run the risk of payment problems from a particular undertaking.

Market assessment

Current structures are not sufficient to support market innovations, creating an 'investment gap'. Assessment has shown that this applies especially to the agricultural subsectors of horticulture and granivores. Projects could relate to:

- upgrading tomato production, for example, geothermally dried tomatoes;
- expanding indoor gardens in greenhouses in the Amsterdam area;
- development of alternative protein products based on mushrooms;
- sales to consumers of professional cultivated fruit trees in various sizes for different occasions.

Figure 13: Selection of financial products



Source: LEI, 2014

Risk Assessment

To estimate the default risk, experiences within existing guarantee schemes for SMEs (BMKB) were reviewed. A review by Carnegie Consult BV (2011) showed that support for innovation averaged about 8% of the BMKB scheme. The average loss on the innovation component was approximately 25% of the annual loss of the scheme. The default risk for innovation within BMKB therefore is approximately three times higher than average.

Alternatively, a look at the historical loss statements within the Guarantee Fund/Guarantee Schemes (table below) shows that the number and amount of paid claims have increased in recent years. Over the 2007-2013 period, the share of claims paid against the total outstanding liabilities was 2.18%. By comparison, from 1990-2004 it was 0.6% (Van der Meulen et al., 2006). This was caused by consecutive years of poor business results, especially in greenhouses. The period from 2007 to 2013 includes BF+ and GL+ schemes with a sustainable component, where the risk is higher than in BF and GL systems.

In recent years (2010-2014), more claims were paid. In the pre-crisis period paid claims for 'normal' guarantees in agriculture were 0.74%. Using experience from the innovation component of the BMKB scheme, the default risk in GMI was around 2% (0.74 x 3). The risk in GMI was some three times higher than the risk in the GL for the first 5 years. Then the risk for loans under the regular GL/GL+ guarantee applies.

Table 4: Paid claims, guarantee amount and total liabilities 2007-2013

	2007	2008	2009	2010	2011	2012	2013
Total amount paid claims (EUR '000)	6	2.1	1.9	11.2	10.8	9	24.4
Total liabilities (EUR '000)	593	513	522	458	448	404	383
Paid claims/liabilities (%)	1.0	0.4	0.4	2.5	2.4	2.2	6.4

Source: Annual Reports Guarantee Fund/Guarantee provided Settlements, various years.

Within the regular guarantees, Agriculture and GL+, the guarantee fee is 3%, for young entrepreneurs it is 1%. Following the risk assessment, fees of 1% were recommended for the Innovations in Agriculture guarantee scheme.

5.3 Defining the governance structure of the FI

5.3.1 Scope

The proposed investment strategy analyses the advantages and disadvantages of the different implementation options (under Article 38 of CPR) and the governance structure is considered in the ex-ante assessment[84].

5.3.2 Proposed methodological elements

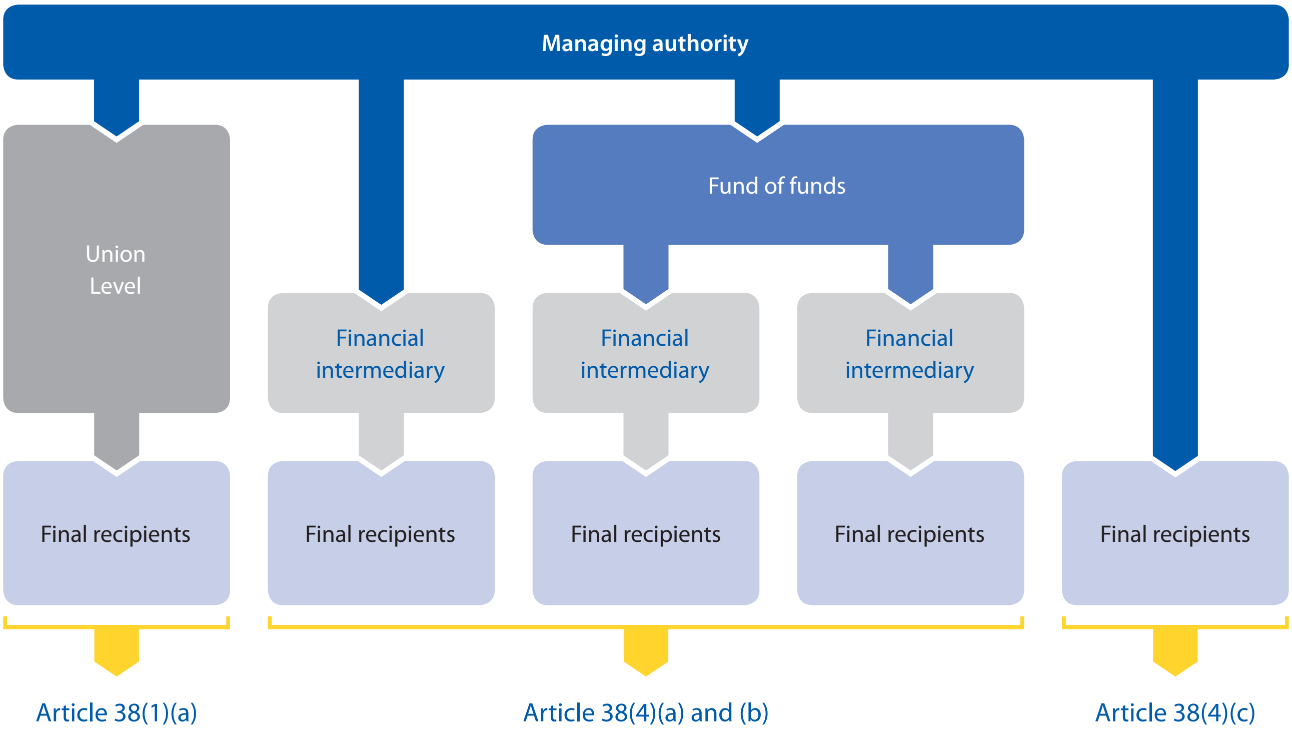
Analysing the advantages and disadvantages of the implementation options

The managing authority may:

- invest in the capital of an existing or a newly created legal entity under Article 38(4)(a);
- entrust implementation tasks to another entity under Article 38(4)(b);
- undertake implementation tasks directly under Article 38(4)(c) for loans and guarantees only;
- contribute EAFRD resources to EU-level FIs under Article 38(1)(a).

84 Roles and responsibilities between the bodies that implement the FI and with the managing authority as well as functions in the oversight of the FI are a function of this decision, but not formally part of the ex-ante.

Figure 14: Implementation options for FIs under EAFRD



Source: *fi-compass*, Developing an action plan, 2015

Each of the implementation options has advantages and disadvantages. Not every option may be appropriate in each case and they should be closely evaluated considering national and regional characteristics.

It is important to note that government support for the agricultural sector is already available in most EU countries. Reliance on such support or existing banks and mortgage institutions may be an important factor in supporting long-term trust between final recipient and lender[85].

There is a breadth of experience in many agricultural sub-sectors on which the governance may rely. The Netherlands has had an Agricultural Loan Guarantee Fund since 1951, with banks lending to the agricultural sector. In Italy, ISMEA has issued credit and financial guarantees for agricultural holdings since 1987.

The implementation option should use existing management experience, sector expertise and bonds between final recipients and banks. Managing authorities are generally advised to investigate investment in the capital of an existing or newly created legal entity, or entrusting implementation to another entity such as the EIB, before considering contributing EAFRD resources to EU-level FIs. For a more detailed overview of the considerations of different options, please see the *fi-compass* factsheet on 'Developing an Action Plan'[86].

Invest in the capital of an existing or newly created legal entity under Article 38(4)(a)

When choosing the implementation option, managing authorities can decide to invest in the capital of an existing or newly created legal entity dedicated to implementing FIs consistent with the objectives of EAFRD.

85 Long-term relationships and bonds between final recipient and lender may help loan extension, by reducing uncertainty, moral hazard and asymmetric information.

86 https://www.fi-compass.eu/publication/brochures-factsheets/developing-action-plan

When a managing authority invests capital in a new or existing entity it must conclude a funding agreement with the entity. The funding agreement defines roles and responsibilities within the FI. As pointed out in the previous section, the funding agreement needs to be consistent with the ex-ante assessment and the RDP, and be sufficiently flexible on the selection of final recipients.

With a new legal entity, managing authorities avoid potential conflicts of interest with existing business objectives (since the entity through which the funds are invested is independent and focused on FI implementation alone). The advantage of an existing legal entity, such as the Agricultural Guarantee Fund in the Netherlands, is relatively quick implementation and minimal set-up costs.

Entrust implementation tasks to another entity under Article 38(4)(b)

Managing authorities can appoint a financial institution for public interest under public control or an International Financial Institution, or appoint the EIB directly (which is in line with public procurement rules), as a manager for a specific FI. Implementation can also be entrusted to other bodies subject to public or private law such as agencies, Public Private Partnership funds, commercial banks and other bodies[87].

The managing authority may entrust implementation tasks (including activities such as monitoring, and communication) to this entity. In compliance with national and EU legislation, the managing authority and the selected entity are responsible for promoting the FI to financial recipients. The entity monitors the FI and reports to the managing authority.

Entities may finance projects themselves or act as a fund of funds and select several financial institutions to act as intermediaries with final recipients.

The entity has to be selected through a process in accordance with EU and national rules. Specific rules for entrustment may apply depending on the nature of the public body selected. According to Article 7 of Commission Delegated Regulation (EU) No 480/2014, when selecting a body, the managing authority shall take due account of the body's experience with the implementation of similar FIs, the body's operational and financial capacity, the expertise and experience of proposed team members, and the nature of the FI to be implemented. The selection shall be transparent and justified on objective grounds and shall not give rise to a conflict of interest. A minimum of the following selection criteria shall be used:

(a) robustness and credibility of the methodology for identifying and appraising financial intermediaries or final recipients as applicable;
(b) the level of management costs and fees for the implementation of the FI and the methodology proposed for their calculation;
(c) terms and conditions applied in relation to support provided to final recipients, including pricing;
(d) the ability to raise resources for investments in final recipients additional to programme contributions;
(e) the ability to demonstrate additional activity in comparison to present activity;
(f) in cases where the body implementing the FI allocates its own financial resources to the FI or shares the risk, proposed measures to align interests and to mitigate possible conflicts of interest.

A body that meets these criteria should be well equipped and experienced in managing funds and investments professionally. Entrustment allows a managing authority with no considerable in-house financial or fund management expertise to build on the know-how and expertise that public and private bodies have of the local financial and legal environment.

87 More information on implementation can be found in a European Commission guidance note about implementation of financial instruments that should be published in the next months and will be available on the following web page: http://ec.europa.eu/regional_policy/en/information/legislation/guidance/

As an example, Slovenia currently foresees entrusting EAFRD FI implementation in the 2014-2020 programming period to a fund of funds manager[88].

Undertake implementation without formally setting up a fund under Article 38(4)(c)

Managing authorities can undertake implementation of a fund distributing loans and grants directly to final recipients.

This option is advisable if the managing authority already has significant experience and knowledge of FIs and if managing authority capacity is sufficient. The full scope of activities, including due diligence, treasury management, risk management, monitoring and reporting are the responsibility of the managing authority.

The managing authority should verify there are no national or local regulations blocking this option, for instance only registered banks or financial institutions being able to lend.

The advantages of this option are simplified procedures allowing for non-grant funding from EAFRD without setting up a dedicated FI which can be complex and time-consuming. The leaner implementation structure would have fewer layers of monitoring and reporting. No funding agreement is required, only a strategy document. This option may also allow managing authority in-house expertise with FIs to be used, resulting in quick implementation.

This is a new option and no specific agricultural experience is available.

Contribute EAFRD resources to EU-level FIs under Article 38(1)(a)

Managing authorities can contribute with EAFRD resources to EU-level FIs under central management such as InnovFin, COSME, EFSI, etc. In the agricultural sector and under the EAFRD, it is advisable to give priority to other implementation options first, before investigating the possible synergies with other EU-level instruments, due to the shared management principle.

This is a new option and no specific agricultural experience is available.

Envisaged combination of the FI with other forms of support

The ex-ante assessment for FIs under EAFRD should help to avoid overlaps and inconsistencies between instruments and seek synergies and complementarities between different forms of support. In the context of the governance structure, one has to consider that Article 37 of the CPR provides for two combinations of support from an FI with grants or other FIs:

- FIs and other forms of support including technical support, interest rate subsidies, and guarantee fee subsidies, may be combined in a single FI operation such as a fund giving both a loan and an additional interest subsidy. In this case the other form of support must be directly linked to the FI and awarded by the same body.
- Support from an FI may also be combined at the level of final recipient with support from another instrument. In this case, two separate operations take place each having a distinct eligible expenditure, such as a grant for building a new cowshed and a loan for milking machines. If a non-dividable investment is supported, the proportional division of support must be recorded and accounted for separately. In this case the FI implementing body is in sole charge of the operations.

Further information can be found in a specific guidance developed by the European Commission on the combination of support from an FI with other forms of support for Member States[89].

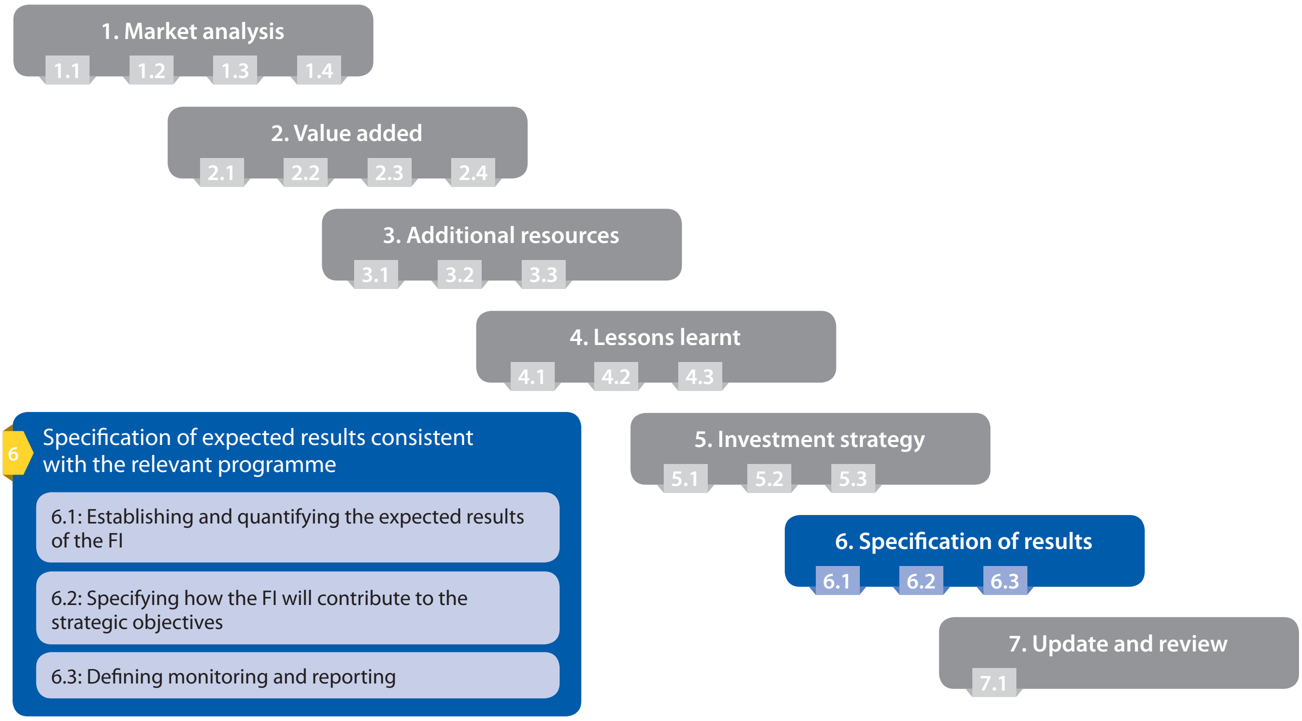
88 https://www.fi-compass.eu/sites/default/files/publications/Presentation_RuralDevelopmentProgrammeOfTheRepublicMaja_Marincek_Vienna_2015.pdf

89 http://ec.europa.eu/regional_policy/sources/thefunds/fin_inst/pdf/guidance_combination_support_en.pdf

6. SPECIFICATION OF EXPECTED RESULTS CONSISTENT WITH THE PROGRAMME

This chapter guides the reader through the steps for specifying the expected results of the FI:

Figure 15: Steps for update and review, following CPR, Article 27(2)(f)



The purpose of specifying expected results is to identify the outcomes and contribution to RDP objectives once the investment strategy (see Chapter 5) has been implemented. Furthermore, this should ensure consistency with the RDP. Result orientation is based on three pillars which have been embedded in agriculture for a long time:

a) result orientation of the RDP, making use of a strong intervention logic, outlining the theory of change;

b) definition of ex-ante conditionalities; and

c) performance framework, milestones and targets ensuring programme process and increasing performance orientation.

Result orientation is important when specifying the results of the FI and their consistency with the RDP.

Specifying the expected results can involve the following questions:

- what are the expected results of the FI?
- how can the FI contribute to the RDP's objectives and measures?
- and how much is this contribution?
- how can this contribution be measured?

6.1 Establishing and quantifying the expected results of the FI

6.1.1 Scope

Cross Ref. Section 1.2

The market assessment and expected value added should help define the proposed investment strategy, which is part of the ex-ante assessment. A finalised investment strategy must be included in any funding agreement (as defined in Annex IV of the CPR).

Monitoring and control as well as fulfilment of legal requirements, such as phased payments, mean specific indicators need to be defined, monitored and reported throughout implementation. These can be detailed in the ex-ante assessment.

The managing authority should build on the content and indicators of the RDP. If the FI covers several focus areas, the indicators should cover the requirements of each focus area.

6.1.2 Proposed methodological elements

When identifying indicators, the managing authority should start with the output, result and impact indicators already available in the RDP:

- Output indicators, as provided by the EC, are indicators specific to measures and focus areas.
- Result indicators are part of the common monitoring and evaluation system for RDPs, as defined in Article 67(f) of the EAFRD Regulation, as well as Commission Implementing Regulation (EU) No 834/2014. They measure the direct, immediate effect of the policy measure, such as the number of jobs created, in relation to specific policy objectives.
- Impact indicators are part of the common monitoring and evaluation system for RDPs, as defined in Article 67(f) of the EAFRD Regulation as well as Commission Implementing Regulation (EU) No 834/2014. These are longer term impacts such as the rural unemployment rate. Overall, impact indicators are linked to general objectives of the CAP.
- Performance indicators measure the FI's operational efficiency.

If the managing authority has to introduce any new measure in order to accommodate the FI then it, likewise, needs to develop / identify the relevant indicators for the measure.

The starting point for developing indicators is the use of the RDP's intervention logic and indicators (see the following example).

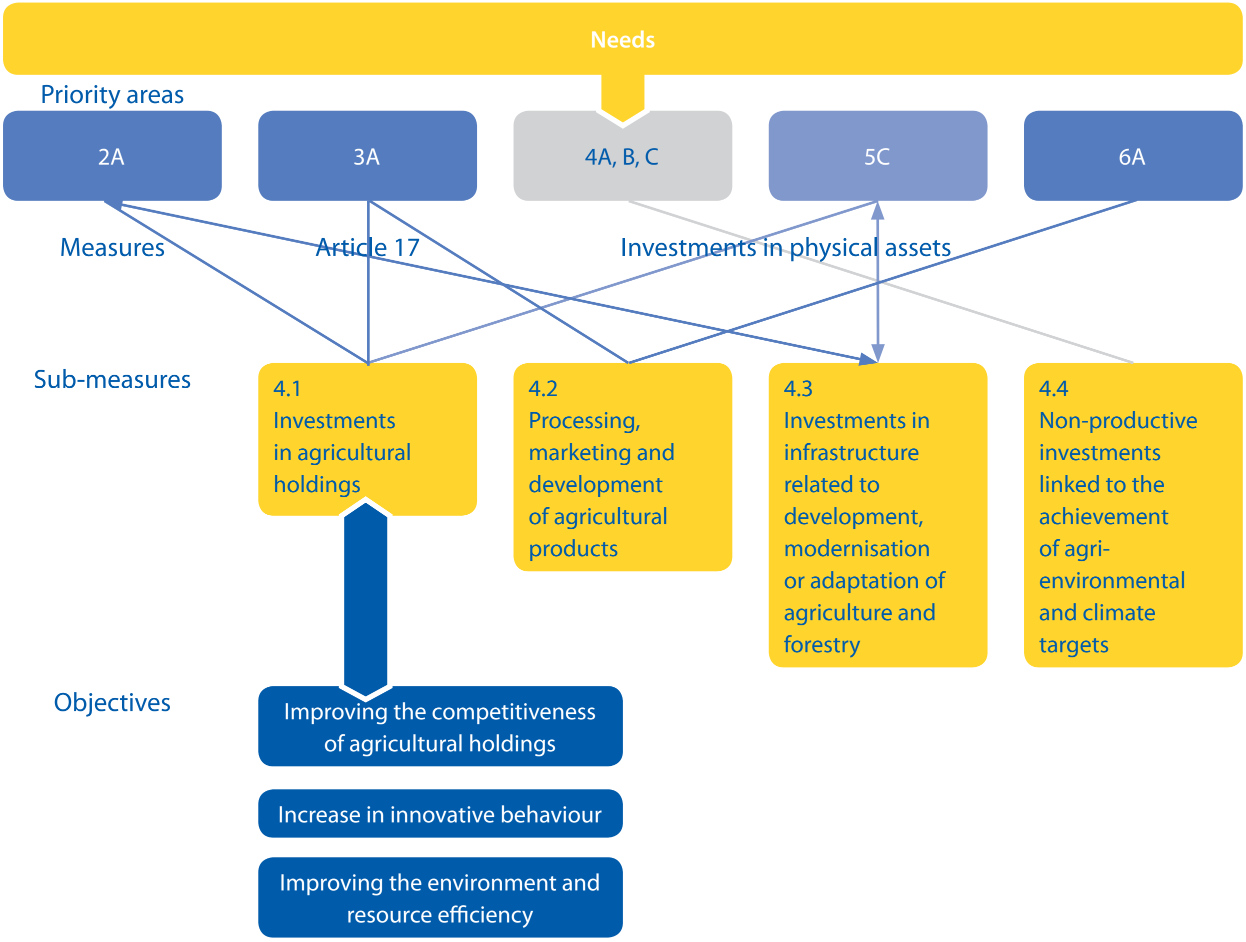
Example 6.1.1

EAFRD Regulation Article 17 – Investments in agricultural holdings, output and result indicators

When setting up the intervention logic from the identified need under the appropriate Article of the EAFRD Regulation, the measures shall target these needs as effectively as possible. In this example a RDP could apply Article 17 'Investments in physical assets' to address needs in the programing area. This measure, based on Article 17 through 'Investments in agricultural holdings', could involve a loan.

An output indicator such as 'Total Volume of Investments' may have been identified for a specific focus area. Consequently, the contribution of the FI must be identified in line with the RDP and focus area intervention logic. When establishing a link between sub-measures and priority areas (i.e. the overall objectives of EU Rural Development policies and subsequently the EU 2020 objectives), or redefining links between measures and objective by defining sub-objectives, then the effects of the single sub-measure on the objective can be measured.

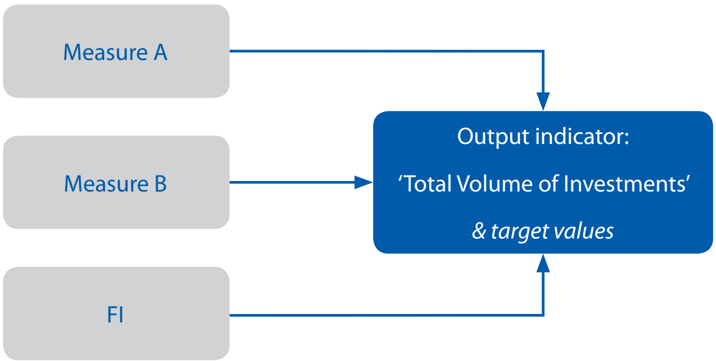
Hierarchy of objectives



In this case the sub-measure 4.1 Investment in agricultural holdings contributes to priorities 2A 'Improving the economic performance of all farms and facilitating farm restructuring and modernisation, notably with a view to increase market participation and orientation as well as agricultural diversification' and 5C 'Facilitating the supply and use of renewable sources of energy, of by-products, wastes, residues and other non-food raw material for purposes of the bio-economy' as well as to a set of objectives such as 'improving the competitiveness of agricultural holdings'.

Based on the market assessment (see Chapter 1) the contribution of the FI to the common output indicator 'Total Volume of Investments' can be clearly identified, differentiating between the effects of grants and loans.

Specifying results and outputs



The result and impact contribution of the FI to the formulation of sub-objectives such as 'improving the competitiveness of agricultural holdings' in combination with the baseline data and market assessment allow the FI contribution to be measured and compared to other RDP interventions.

Based on existing indicators in the RDP the indicator should:

- take into account the programme objectives and EU rules on indicator results;
- identify the intended changes;
- take into account project selection criteria;
- identify the baseline.

6.2 Specifying the FI contribution to strategic objectives

6.2.1 Scope

Generally, '*impact indicators are linked to the general objectives of the CAP, result indicators to the specific objectives and output indicators to individual policy interventions. Finally, there is a set of context indicators, which provide information on general trends of economy, state of the environment, general climate indicators, agricultural and rural statistics, etc. Together the indicators can be considered as the 'dashboard' of the CAP policy, giving a set of essential information*'[90].

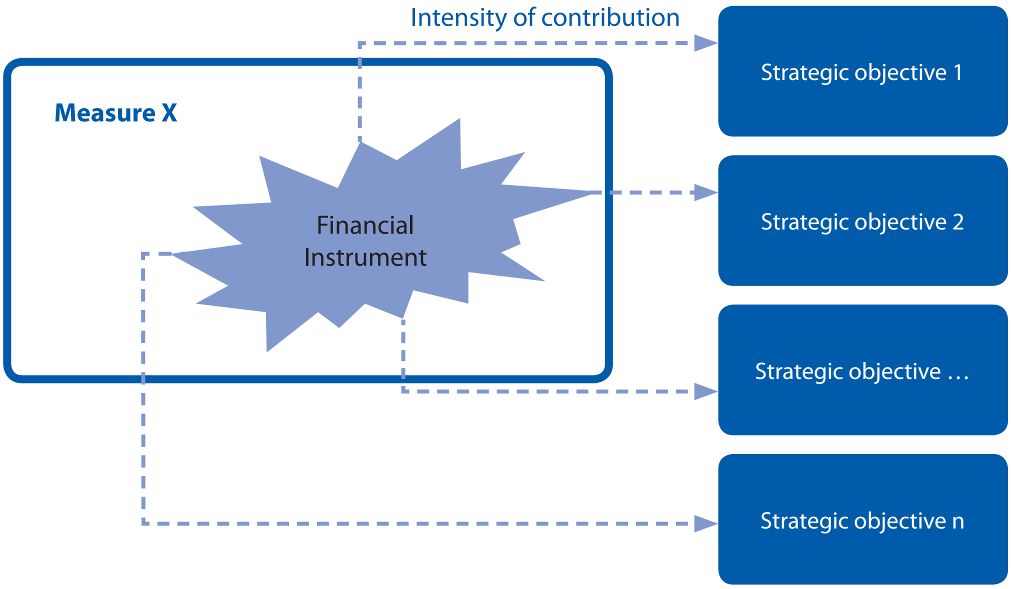
The FI contribution to the objective should be described at the level of the focus area. For output and results the FI is considered another form of EAFRD support. In this logic, the measure contributes to the focus area and the FI to the measure itself. If an FI is embedded in several measures, the interaction between the different measures and the FI's specific role in achieving the objectives should be described.

6.2.2 Proposed methodological elements

Based on the establishment and quantification of expected results, the contribution of the financial product to the RDP's strategic objective needs to be identified (see following figure).

90 DG AGRI (2015): The Monitoring and Evaluation Framework for the Common Agricultural Policy 2014-2020. p. 15.

Figure 16: FI's contribution to strategic objectives



The quantification of results will be part of the contribution of the measure to the overall results. However, there will be FI specific results reported within the monitoring and evaluation framework of the EAFRD (see below).

Example 6.2.1

Type of FI	**Loan Fund to support investments in regional irrigation infrastructure**				
Source of financing	**EAFRD**				
Funds Budget	**EUR**				
Specific Objective of corresponding focus area	**Improving the competitiveness of agricultural holdings**				
	Indicator	**Unit**	**Baseline**	**Target**	**Source**
Result indicator of corresponding focus area	% of agriculture holdings with RDP support for investment in restructuring	%	xx (2009)	xx (2022)	National agricultural statistics
	Indicator	**Unit**	**Baseline**	**Target**	**Source**
Output indicators (as stated in the EAFRD common monitor-ing and evaluation framework)	No. of holdings supported	number	-	xx	Monitoring
	Total public expenditure	EUR	-	xx	Monitoring

	Indicator	Unit	Baseline	Target	Source
Impact indicator (as stated in the EAFRD common monitoring and evaluation framework)	Agricultural entrepreneurial income	EUR	xx (2014)	xx (2022)	FADN/ EU agricultural statistics
	Total factor productivity in agriculture	ratio	xx (2014)	xx (2022)	FADN/ EU agricultural statistics
	Indicator	**Unit**		**Target**	**Source**
Performance indicators	Leverage effect	ratio (total loans/Union contribution)		yy	Monitoring
	Revolving effect	ratio (total loans/fund size)		yy	Monitoring
	Management costs	% of outstanding loans		yy	Monitoring

The quantification and assessment of FI effects should identify the change that can be attributed to the FI. This requires an understanding of what would have happened to final recipients in the absence of the intervention. Methods like this call for good data not only on final recipients, but also on non-supported 'test-groups'. Therefore, the ex-ante assessment should ensure availability of this data, looking towards potential ex-post assessment exercises.

In the evaluation plan for the RDP there is a section for data requirements and the availability of data. If new and specific data are needed to depict the result of the FI, such as multiplier, leverage or other FI specific monitoring, then this should be included in the RDP evaluation plan accordingly.

6.3 Defining monitoring and reporting

6.3.1 Scope

To meet European Commission requirements for reporting on FIs as an Annex to the Annual Implementation Reports (AIRs);

(1) The reporting requirements should be included in the funding agreement. Therefore, the monitoring process should be set up at the level of the FI, taking into account the governance structure.
(2) The managing authority needs to make sure that all information required for reporting is available. Meaning that the data should be specified in the funding agreement, with the requirements for IT-based data collection and reporting. This information is further detailed in Annex IV of the CPR.

The common monitoring and evaluation framework for EAFRD promotes simplification and coherence while maintaining in-depth coverage of policy interventions. The monitoring and evaluation system is set out by the CPR, which defines the common monitoring and evaluation elements for ESIF; and the EAFRD Regulation, which addresses the specifics for RDPs.

Monitoring should take account of the FI's governance structure to embed information collection and reporting in the overall organisation. Reporting can be monthly, quarterly or semi-annual to identify barriers to implementation and to facilitate management.

Article 46 of the CPR indicates the information that the managing authority must send to the European Commission for each FI:

- The dataset should be included in the funding agreement. A standard reporting format, for instance an IT-based system or a common reporting template would make data aggregation more efficient. This dataset and its requirements should be based on the RDP evaluation plan. Programme implementation arrangements should include a description of monitoring procedures and the data required.
- Progress reports on FI implementation should compare progress in comparison with the investment strategy and the provisions of the funding agreement.[91]
- For financial reporting, '*the information with respect to accountability is important. Annex IV states that minimum requirements of such documentation are included in the funding agreement. As there are different regimes to implement FIs, the minimum requirements are expected to be different and adapted to the situation. If the managing authority has entrusted the implementation of the FI to a financial intermediary, the documentation and the audit of the escrow account (normally a part of the audit of the whole entity where the escrow account is located) will be important. A system to document the current payments for the management and liabilities for present and future fees will be needed as well. If the FI is implemented by a dedicated entity such as a fund with its own legal personality and defined governance for different groups of investors (who may have different non-pari passu arrangements) then a complete set of financial statements will be needed, including: Economic outturn account, Balance sheet and P&L, Management costs statement and various notes to financial statements*'[92].

6.3.2 Proposed methodological elements

Monitoring arrangements for FIs should be straightforward, as the information can be checked periodically. The following can be identified for the different types of FI.

Box 10: Monitoring specifics of different financial products	
Guarantees	Capitalisation on the basis of the new rules for phased payments as the CPR states that each amount paid from the programme to the FI shall not exceed 25% of the total amount of programme contributions committed to the FI.
Loan	Indicators monitor the leverage effect and revolving effect.
Equity and venture capital	Three indicators on performance shall be applied and assessed for monitoring, i.e. leverage effect, revolving effect and bankruptcies.

91 'In addition to complying with the requirements of Article 50 of Regulation (EU) No 1303/2013, the annual implementation report submitted in 2019 shall also cover, a description of the implementation of any sub-programmes included within the programme and an assessment of progress made in ensuring an integrated approach to use of the EAFRD and other EU financial instruments to support the territorial development of rural areas, including through local development strategies.' (see Article 75 EAFRD Regulation).

92 See EC/EIB (2014b): Ex-ante assessment methodology for financial instruments in the 2014-2020 programming period (Volume 1), p. 104.

Box 11: Leverage effect, revolving effect, default rate

Cross Ref. Section 2.1.2

Leverage effect: for the definition and calculation see

Multiplier effect: for the definition and calculation see

Revolving effect: for the definition and calculation see

Default rate: defined as the amounts of loans in default compared to the loans issued. This will also be relevant for guarantees, though such FIs should monitor eligible claims.

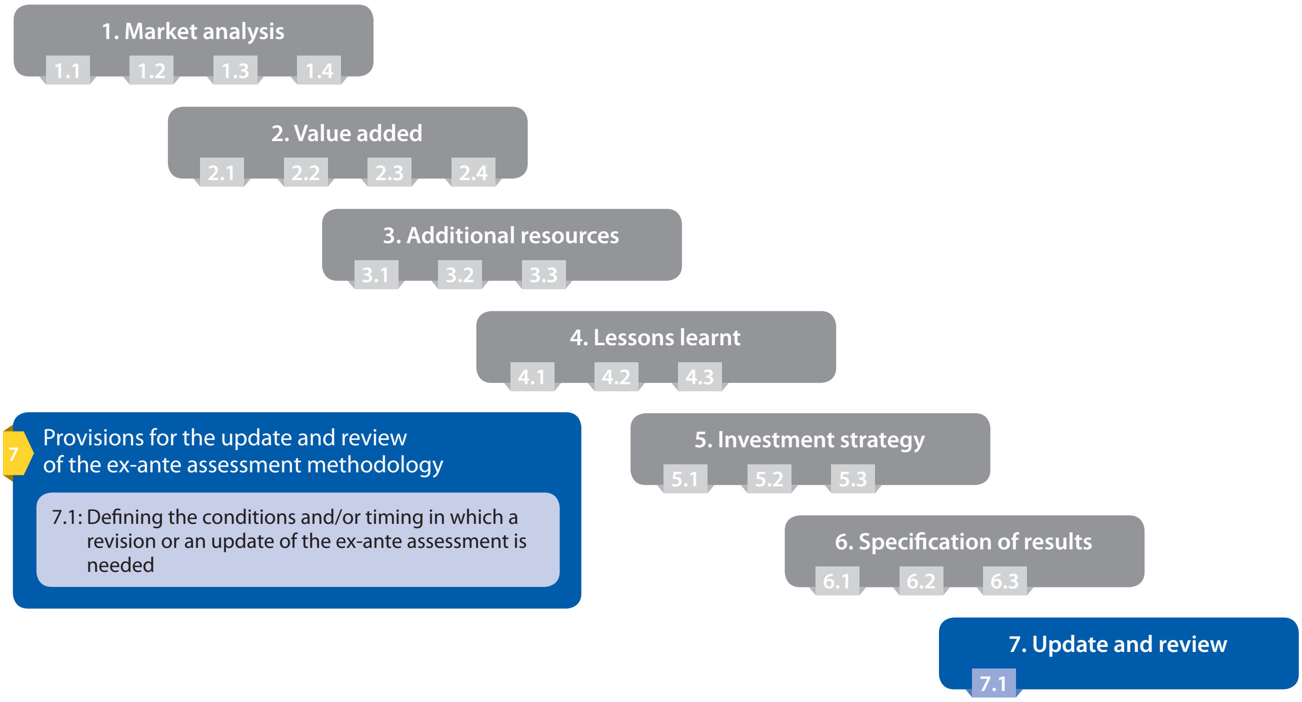
These indicators must be reported periodically in an Annex to the Annual Implementation Report.

Generally, the winding up and exit policy will require indicators with clear definitions such as released and ongoing guarantees, defaults, the potential recovery of debts in default, and the value of any collateral.

7. PROVISION FOR THE UPDATE AND REVIEW OF THE EX-ANTE ASSESSMENT

Conditions of markets as well as the trends in investments may change during implementation of the FI. As a result, Article 37(2)(g) of the CPR requires that the ex-ante assessment includes provisions for its revision and update if it no longer represents the original market conditions.

Figure 17: Steps for update and review, following CPR, Article 27(2)(g)



The following questions should be kept in mind:

- what conditions and timing require a revision/update of the ex-ante assessment? (Step 7.1)
- what are the consequences of the update and review for monitoring and reporting? (Step 7.2)

7.1 Defining when a revision or update of the ex-ante assessment is needed

7.1.1 Scope

Cross Ref. Section 5
Cross Ref. Section 8

The FI is built on well-defined objectives. If the results of the FI do not meet expectations, an update could be considered. The main drivers for considering an update could be[93,94]:

- Targets not matching results. Strong divergence between the two may threaten delivery of the FI objectives. The main aspect of importance is the consistency with the programme strategy (see Chapter 2) and the value added of the potential FI (see Chapter 2).
- Inadequate support in comparison with demands. This may reduce the ability of the FI to reach its objectives. If phased payments of the EU contribution do not match a faster take-up of the support scheme than envisaged, a review may be needed. The review may show:
  - The market situation is consistent, but the implementation capacity has been underestimated, or overestimated.
  - The implementation is in line with expectations; however, a change in the market created significantly higher or lower demand for the support scheme than envisaged.
  - Change in the financial markets (e.g. similar to the economic crisis, price reduction, trade evolutions) affecting access to funding for farmers.

7.1.2 Proposed methodological elements

The need for an update and review of the ex-ante assessment could be signalled by:

- reporting/monitoring of the FI (at least once per year);
- reporting data sending signals for an update more rapidly than external data;
- predefined trigger values;
- ad hoc or planned evaluations (e.g. ongoing evaluations);
- a drastic change in the economic environment such as a major financial crisis;
- a more gradual change would result in smaller updates, reviewing single steps of the ex-ante assessment.

Therefore, the need for an update can be related to a dramatic change in the market or poor performance of the FI.

A dramatic change in agricultural markets, for example, means that unpredicted market shocks, such as the impact of a political embargo, reduce the performance of the FI.

In the instance of updates, the first and most important part of the ex-ante assessment to be updated is the market analysis (Step 1) with an assessment of the financing gap, targeted groups, types of FIs, etc. If this highlights a change in the FI environment, the investment strategy will have to be revised.

Poor performance may be related to the ex-ante assessment not correctly estimating the appropriate volumes or the need for public investment.

93 See EC/EIB (2014a): Ex-ante assessment for ESIF financial instruments Quick reference guide, p. 34.

94 See EC/EIB (2014b): Ex-ante assessment methodology for financial instruments in the 2014-2020 programming period (Volume 1), p. 105.

This may happen with:

- Miscalculation of the risk taken by the FI. The risk profile is significantly higher than expected, leading to significant losses and reduced revolving funds. A review could adjust the risk profile to ensure an adequate level of revolving money and maintain leverage.
- The review may show that the initial risk profile was overestimated. In this instance, part of the resources committed can be released for the same or other targets.

Cross Ref. Section 3

Finally, the summary findings and conclusions may be reviewed, with the inclusion of the details that may have prompted the update and changes.

Optional: This information can be included in the monitoring and reporting provisions as well.

The updated ex-ante assessment may require the managing authority to change the FI to improve its strategic fit with the RDP. Therefore, an update permits the introduction of flexibility in the programme, however, the procedure is triggered and carried out solely by the managing authority.

Based on modifications to the ex-ante assessment, the monitoring and reporting arrangements would then also require adapting, taking into account the different financial products, as illustrated in Chapter 5.

Cross Ref. Section 5

Winding-up and exit policy conditions may need to be redefined, therefore clear definitions and the decommitment of funds at the end of the programming period are relevant.

Box 12: Trigger values indicating the need for an update

Triggers:

- Certified expenditure for different forms of finance, such as non-repayable grants or FIs, indicating the need to shift resources
- Share of direct payment income by farm type
- Farm income

8. EX-ANTE ASSESSMENT COMPLETENESS CHECKLIST

The following checklist helps readers carry out the tasks by summarising the key points for each step of the ex-ante assessment. These key points are cross-referenced to the respective chapter, along with the corresponding article of the CPR.

The checklist also includes the publication rules in Article 37(3) of the CPR:

- within three months of its finalisation, the summary findings and conclusions of the ex-ante assessment need to be published;
- the ex-ante assessment needs to be submitted to the monitoring committee for information purposes.

It has to be noted, that although the checklist implies that preparing the assessment is a linear task, it can be prepared in stages or can develop iteratively. Completing some steps may require going back and reconsidering previous findings (see also Section ii).

Cross Ref. Section ii

There is no formal deadline for the finalisation of the ex-ante assessment, however it must be completed before the managing authority makes RDP contributions to the FI.

Checklist Points	Chapter Reference	Done
Economic context	1	
Demand for finance	1	
Supply of finance	1	
Gap between supply and demand	1	
Quantitative evaluation of the value added	2	
Qualitative evaluation of the value added	2	
Consistency with other forms of public intervention addressing the same market	2	
State aid implications	3	
Additional public and private resources	3	
Need for and extent of preferential remuneration for private investors	3	

Checklist Points	Chapter Reference	Done
Collation of information on experience, particularly from the same country or region	4	
Identification of success factors and/or pitfalls of these experiences	4	
Using the information to enhance performance of the FI (e.g. risk mitigation)	4	
An examination of implementation options within the meaning of Article 38	5	
Analysis of financial products to be offered	5	
Definition of target final recipients and any combination with grant support	5	
Set up and quantification of the expected results by means of output, result and performance indicators	6	
Specification of how the envisaged FI will contribute to the strategic objectives	6	
Definition of the system to efficiently monitor the FI, facilitate reporting requirements and identify improvements	6	
Definition of conditions and/or timing for a revision or update of the ex-ante assessment & incorporation of this in the monitoring and reporting provisions (optional)	7	
Summary findings and conclusions are published within 3 months of finalisation of the ex-ante assessment	.	
Submission of ex-ante assessment to the monitoring committee	.	

ANNEXES

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Regulation (EU) No 1305/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005.

Regulation (EU) No 1306/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013 on the financing, management and monitoring of the common agricultural policy and repealing Council Regulations (EEC) No 352/78, (EC) No 165/94, (EC) No 2799/98, (EC) No 814/2000, (EC) No 1290/2005 and (EC) No 485/2008.

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Commission Delegated Regulation (EU) No 480/2014 of 3 March 2014 supplementing Regulation (EU) No 1303/2013 of the European Parliament and of the Council laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund.

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A.2 Proposed sources and tools

A.2.1 Databases

General databases	Recommended for
European Commission 'Prospects for agricultural markets and income in the EU 2014-2024 (12/2014)': Outlook for the major EU agricultural commodity markets and agricultural income; http://ec.europa.eu/agriculture/markets-and-prices/medium-term-outlook/index_en.htm	**Step 1.1, Step 1.3**
OECD-FAO Agricultural Outlook: Market projections to 2023 for major agricultural commodities, biofuels and fish across 41 countries and 12 regions: OECD member countries (European Union as a region): http://www.agri-outlook.org/	**Step 1.1, Step 1.3**
Eurostat – Agriculture, forestry and fisheries-database: http://ec.europa.eu/eurostat/web/products-statistical-books/-/KS-FK-14-001	**Step 1.1, Step 1.3.**
Eurostat, Farm structure statistics, for instance: Share of gross fixed capital formation in different asset classes (e.g. agricultural products, machines and other equipment, transport equipment, farm buildings) on total gross fixed capital formation in agriculture as provided by EUROSTAT: • Economic accounts for agriculture – values at current prices (aact_eaa01) http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=aact_eaa01&lang=en • http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/	**Step 1.1, Step 1.3**

Financing databases	Recommended for
ECB Monetary and financial statistics; Statistics regarding monetary financial institutions, investment funds, financial stability and financial markets, and payments within the Euro area: https://sdw.ecb.europa.eu/browse.do?node=2018773	**Step 1.2, Step 3.1**
Statistical data of finance markets: Observations and in-depth analyses from institutions, published or available on request from National Central Banks. Examples are: • Banco de España, BOLETÍN ESTADÍSTICO: http://www.bde.es/webbde/es/estadis/infoest/bolest.html • Deutsche Bundesbank, Monatsbericht, e.g. from February 2015: https://www.bundesbank.de/Redaktion/DE/Downloads/Veroeffentlichungen/Monatsberichte/2015/2015_02_monatsbericht.pdf?__blob=publicationFile • Bank of Lithuania (Lietuvos bankas), Lithuanian Economic Review 2014: https://www.lb.lt/lithuanian_economic_review_december_2014 • Bank of Lithuania (Lietuvos bankas), Structure of Loans by Economic Activities (in excel-format): http://www.lb.lt/stat_pub/statbrowser.aspx?group=8071&lang=en	**Step 1.2**
FADN database	
European Commission, CAP post-2013: Economic and policy Briefs • The Farm Accountancy Data Network (FADN) is a European system of sample surveys that are run each year and collect structural and accountancy data relating to farms; the aim is to monitor the income and business activities of agricultural holdings and to evaluate the impacts of the Common Agricultural Policy (CAP): http://ec.europa.eu/agriculture/rica/	**Step 1.1, Step 1.2, Step 1.3**
Data on the general economic context may be retrieved for the following indicators: • Farm net value added • Net worth • Total asset value per farm composition of assets	**Step 1.1, Step 1.2, Step 1.3**

For analysis of balance sheet & Assets/Measures: • SE446: Land, permanent crops & quotas (Agricultural land, permanent crops, improvements to land, quotas and other prescribed rights (including acquisition costs) and forest land in EUR) • SE450 Buildings (Buildings and fixed equipment to the holder in EUR) • SE455: Machinery (Machines, tractors, cars and lorries, irrigation equipment (except when of little value or used only during one year) in EUR) • SE460: Breeding livestock (Value at closing valuation of breeding heifers, dairy cows, other cows, breeding goats, ewes, breeding sows in EUR) • SE465: Total current assets (Non-breeding livestock and circulation capital (stocks of agricultural products and other circulating capital) in EUR) • SE480: Other circulating capital (Advance for crops, holdings of agricultural shares, amounts receivable in the short-term, cash balances in hand or at the bank (assets necessary for running the holding) in EUR) • SE485: Total liabilities (Value at closing valuation of total of (long-, medium- or short-term) loans still to be repaid in EUR) • SE490: Long & medium-term loans (Loans contracted for a period of more than one year in EUR) • SE495: Short-term loans (Loans contracted for less than one year and outstanding cash payments in EUR) • SE510: Average farm capital (Average value of working capital = livestock + permanent crops + land improvements + buildings + machinery and equipment + circulating capital) in EUR) • SE516: Gross Investment (Purchases – Sales of Fixed assets + breeding livestock change of valuation in EUR) • SE521: Net Investment (Gross Investment – Depreciation in EUR) • SE526/SE530: Cash Flow (1) & (2) (The holding's capacity for saving and self-financing in EUR) • SE532: Cash flow/total capital in EUR	**Step 1.1, Step 1.2, Step 1.3**
For the assessment of loan-to-value ratios and farm business income, access to credit and access to collateral, consider the following variables from the FADN database: • Farm income (Total Output (SE131) + Total Subsidies–excluding on investments (SE605)- Total Input (SE270) • Current farm assets (Total current assets (SE465) As a change (=year n- year (n-1)) • Long term farm assets (Total fixed assets (SE441) As a change (=year n- year (n-1) • Actual change in debt use (Long-term (SE490) + Short term (SE495) debt)	**Step 1.1, Step 1.2, Step 1.3**

A.2.2 Literature

Economic background	Recommended for
European Commission, CAP post-2013: Economic and policy Briefs Cover a range of issues of relevance to the current CAP reform and in-depth analyses of relevant agricultural trade and agri-trade policy issues: http://ec.europa.eu/agriculture/cap-post-2013/briefs/index_en.htm	**Step 1.1**
MAP – Monitoring Agri-trade Policy Detailed overview of EU agricultural and food trade in 2013, with a focus on key partners and key products: http://ec.europa.eu/agriculture/trade-analysis/map/index_en.htm	**Step 1.1**
European Commission, 'Potential trade agreements: Impact assessment studies' Provides detailed economic analyses on the impact of potential trade agreements: http://ec.europa.eu/agriculture/trade-analysis/impact-assessment/index_en.htm	**Step 1.1**
Factor Markets FP 7 research project	
Various publications in the field: http://www.factormarkets.eu/publications Examples of publications: • Pietola, K.; Myyrä, S.; Heikkilä, A.-M. (2011): The Penetration of Financial Instability in Agriculture Credit and Leveraging. Factor Markets Working Paper No 2, January 2011. • Ciaian, P.; Falkowski, J.; d'Artis, K.; Pokrivcak, J. (2011): Productivity and Credit Constraints. Firm-Level Evidence from Propensity Score Matching. Factor Markets Working Paper No 3, September 2011. • Curti, J. (2012): Determinants of Financial Capital Use. Review of theories and implications for rural businesses. Factor Markets Working Paper No 19, January 2012. • Jansson, K. H; Huisman, C. J.; Lagerkvist, C., J.; Rabinowicz, E. (2013): Agricultural Credit Market Institutions. A Comparison of Selected European Countries. Factor Markets Working Paper No 33, January 2013. • Jansson, K. H; Lagerkvist, C., J. (2013): Performance Indicators in Agricultural Financial Markets. Factor Markets Working Paper No 43, May 2013.	**Step 1.2, Step 1.3, Step 1.4, Step 2.1, Step 2.2**

The evaluation of FIs for agriculture implemented in the past	Recommended for
Evaluation of implemented FIs for agriculture This is probably the most valuable information. Many Member States have experience with public or semi-public FIs, sometimes provided by the national or regional authorities, sometimes provided from public banking institutes, social security institutions, etc. Information available from the following EAFRD (2007-13) programmes: • Latvia • Lithuania • Romania • Bulgaria • Greece • Italy: Calabria, Basilicata, Campagnia, Molise, Puglia, Sicily, Lazio, Umbria • France: Corsica	**Step 1.2, Step 1.3, Step 1.4, Step 2.1, Step 2.2, Step 2.3, Step 2.4, Step 3.1, Step 3.2, Step 3.3, Step 5.1, Step 5.2, Step 5.3**
Additional literature • European Court of Auditors (2012): Financial Instruments for SMEs co-financed by the European Regional Development Fund. Special Report No 2, 2012. • European Court of Auditors (2015): Are financial instruments a successful and promising tool in the rural development area? Special Report No 5, 2015. • Kraemer-Eis, H.; Lang, F. (2014): Guidelines for SME Access to Finance Market Assessments (GAFMA). Working Paper 2014/22, EIF – Research & Market Analysis: http://www.eif.org/news_centre/publications/eif_wp_22_gafma_april14_fv.pdf • EC/EIB (2013): Financial Instruments: A Stock-taking Exercise in Preparation for the 2014-2020 Programming Period: http://ec.europa.eu/regional_policy/sources/thefunds/instruments/doc/fIs_stocktaking_final.pdf • The annual reports of DG REGIO on the progress of the FIs[95] provide statistical data and they are a unique source to observe the flow of investment contributions over time. They draw conclusions, including the need for due attention to achieve scale and critical mass for FIs. • European Commission, Fiche No 4B: Reporting on Financial Instruments to the Commission under the annual and final implementation reports, version 2, 22 July 2013. http://ec.europa.eu/regional_policy/sources/what/future/pdf/preparation/2_fiche_4b_ia_financial_instruments_reporting_template_2013_22_07.pdf	**Step 1.2, Step 1.3, Step 1.4, Step 2.1, Step 2.2, Step 2.3, Step 2.4, Step 3.1, Step 3.2, Step 3.3, Step 4.1, Step 5.1, Step 5.2, Step 6.1, Step 6.2, Step 6.3**

95 See DG Regio: Summary of data on the progress made in financing and implementing financial engineering instruments co-financed by Structural Funds.

Policy orientations and legislative/regulatory background	Recommended for
• Agricultural De Minimis Regulation (EC) No 1408/2013 of 18 Dec. 2013 on the application of Article 107 and 108 of the TFEU to de minimis aid in the agriculture sector. • GBER Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty. • ABER Regulation (EC) No 702/2014 of 25 June 2014 declaring certain categories of aid in the agricultural and forestry sectors and in rural areas compatible with the internal market in application of Articles 107 and 108 of the Treaty on the Functioning of the European Union. • EAFRD Guidelines for State aid in the agricultural and forestry sectors and in rural areas 2014 – 2020 ('GL'), 2014/C 204/01. • Guidelines for State aid to promote risk finance, European Commission, C2014 34/2. • Other Laws enforcing the objective of the envisaged FI which may make the FI redundant. • Laws ruling out the objective of the FI.	**Step 2.3, Step 2.4**
Information on other public financial interventions, such as: • Grant programmes • Other FI • Activities from other sources of budget and other levels of administration • Support offered by managing authority from any existing revolving funds	**Step 2.3, Step 2.4**
Information on fiscal interventions, such as: • Tax reductions or exemptions • State transfers • Transfers of the social security system	**Step 2.3, Step 2.4**

A.2.3 Webpages

General webpages	Recommended for
JESSICA website • http://www.eib.org/products/blending/jessica/?lang=en	Step 4.1, Step 5.1, Step 5.2
JEREMIE website • http://www.eib.org/products/blending/jeremie/index.htm	Step 4.1, Step 5.1, Step 5.2
Webpages of managing authorities of other RDPs for • programme documents • evaluations if available • audit reports by audit authorities and Commission services • other elements of ex-ante assessments (via financial institutions, universities, etc.)	Step 4.1, Step 5.1, Step 5.2

A.2.4 Tools and methods

Qualitative methods	Recommended for
Interviews with: • financial institutions, suppliers, farmer cooperative banks, mortgage institutions or government credit institutions; • different stakeholder groups, such as representatives from agricultural cooperatives or sector experts. *These may be used to understand the economic and political context for agricultural markets and enrich the findings from desk research with qualitative data.* Interviews with potential investors such as: • financial institutions, suppliers, farmer cooperative banks, mortgage institutions or government credit institutions, funds investing in food and agri-businesses and related platforms such as foodtechconnect.com, seed accelerators and business incubators. *These may be used to understand private investments in agricultural businesses and enrich the findings from desk research with qualitative data.* Interviews with: • implementing Bodies, • financial institutions, suppliers, farmer cooperative banks, mortgage institutions or government credit institutions. *These interviews may be used to gain insight into experiences, barriers and success factors with FI implementation.*	Step 1.1, Step 1.2, Step 1.3, Step 1.4, Step 2.1, Step 2.2. Step 4.1, Step 4.2, Step 4.3, Step 5.2

Focus groups Focus Groups are formalised and typically moderated meetings of stakeholder groups (from the demand and/or supply side such as farmers' associations, business associations, financial institutions, and venture capitalists) to discuss access to finance. Interviews and/or focus group meetings should be structured, well planned, and properly documented; the summarised findings should be confirmed by the participants.	Step 1.1, Step 1.2, Step 1.3, Step 1.4, Step 4.1, Step 4.2, Step 4.3, Step 5.2, Step 6.1, Step 6.2, Step 6.3, Step 7.1
Consultation process with final recipients Experiences from previous programming periods and implemented FIs may suggest that the qualitative dimension of the value added can be supported through a consultation process with final recipients on the benefits of FIs/grants/credit.	Step 2.1, Step 2.2
Desk research On potential investors such as banks and investment funds, but also literature such as: • Jansson, K. H; Huisman, C. J.; Lagerkvist, C., J.; Rabinowicz, E. (2013): Agricultural Credit Market Institutions. A Comparison of Selected European Countries. Factor Markets Working Paper No 33, January 2013. For the agricultural sector, cooperation in fund management and fund governance with other ESIF funds may be a particularly important in achieving critical mass for the sustainable implementation of the FI in the agricultural sector. Desk research should highlight the potential contribution of FIs to sub-sectoral needs.	Step 3.1, Step 3.2 Step 5.3
Risk analysis for applying lessons learnt: • risk identification, assessment, response, monitoring & control.	Step 4.1, Step 4.2, Step 4.3, Step 5.2, Step 7.1
Synergy mapping for visualising different risks and links.	Step 4.1, Step 4.2, Step 4.3, Step 5.2, Step 7.1
SWOT analysis for applying lessons learnt/decision support tool: • identifying strengths, weaknesses, opportunities and threats; • illustration of positive and negative aspects.	Step 4.1, Step 4.2, Step 4.3, Step 5.2

Consistency check with the RDP The proposed investment strategy needs to be aligned with priorities defined in the ex-ante evaluation of the RDP, which has already provided an indicative definition of the strategic priority axis/focus areas, the share of ESI Funds to be allocated to each axis/focus area and provided an indicative definition of the amount to be delivered through FIs. The main tool is a consistency check list for assessing coherence with RDP targets, objectives and focus areas. The consistency check list may be found under Step 5.2 of this guidance.	**Step 5.2**
Quantitative methods	
Target group surveys We particularly recommend: • target group surveys with agricultural holdings from the sub-sector to assist with quantification of demand for financial products; • target group surveys to estimate future finance gaps by determining the expected financing needs and the expected availability of financing over the next 12 months. Target groups • regional famers • financial institutions Should no survey and insufficient statistical data be available, a dedicated survey could be developed for the ex-ante assessment. *Basic survey example in Annex A.3*	**Step 1.3, Step 1.4**
Model calculations/scenario comparisons *See Chapter 5.5.2 Proposed methodological elements & 6.6.2 Proposed methodological elements*	**Step 2.1, Step 2.2, Step 3.2**
Counterfactual impact assessment for identifying the FI's net effects • difference-in-difference • propensity Score Matching • discontinuity design • pipeline approach	**Step 6.1, Step 6.2, Step 6.3**

Combination of quantitative and qualitative methods	Recommended for
Value-benefit analysis The value benefit analysis is a very useful tool for preparing decisions systematically. Its actual advantage is that non-quantitative, so called 'soft', criteria can be taken into account. The value benefit analysis can contribute to a vast set of practical applications. Since the value benefit analysis integrates soft criteria it measures the effectiveness more than the efficiency of a solution as it promotes: • enumerated alternatives • established weights for the criteria • established factors to rate the criteria • determined value of benefit.	**Step 2.1, Step 2.2**
Cost–utility analysis Cost–utility analysis is a form of financial analysis used to guide procurement decisions. Its estimates the ratio between the cost and the benefit of an intervention in qualitative terms. So it can be considered a type of cost-effectiveness analysis, and the two terms are often used interchangeably.	
Triangulation of quantitative and qualitative results Triangulation is a powerful technique that facilitates validation of data through cross verification from two or more sources. The idea is that one can be more confident with a result if different methods lead to the same result: • it can be used in both quantitative and qualitative studies. • it is appropriate for verifying the credibility of qualitative analyses. *Further reading e.g.: Given, Lisa (Ed.), 'The SAGE Encyclopaedia of Qualitative Research Methods.' Sage Publications.*	

A.3 Example survey to collect data in support of analysing the financial gap (see steps 1.3 and 1.4)

There is no perfect solution to measure demand side imperfections in agricultural financial markets. The methodology below presents a pragmatic approach to calculating financing gaps via a target group survey.

Surveys are a form of stakeholder interview but with a large number of interviewees and a pre-defined set of questions. The target group survey facilitates the collection of data and information on the demand for financing by agricultural holdings. The survey will help to determine how many applications are rejected or missed due to insufficient financial viability of the projects and how many are due to market failure.

Glossary

Expression	Explanation
Equity investment	Capital is invested directly or indirectly in return for total or partial ownership of a firm; the equity investor may assume some management control of the firm, may share the firm's profits and may sell the acquired shares.
Factoring	Factoring is a financial transaction and a type of debtor finance in which a business sells its accounts receivable (i.e. invoices) to a third party (called a factor) at a discount.
Guarantees (including export guarantees)	An undertaking by a party (the guarantee fund) to bear at a predefined guarantee rate principal and interest due in case of default of a loan (assurance is given to a lender that their capital will be repaid if a borrower is not able to repay a loan). A guarantee always leaves some of the risk with the lender and the borrower remains liable for the loan. Guarantees can take effect on first demand or not.
Leasing/ renting finance	A lease agreement is a contract between two parties, the lessor and the lessee. The lessor is the legal owner of the asset, the lessee obtains the right to use the asset in return for rental payments.
Long- and medium-term loans	A long-, or medium-term agreement which obliges the lender to make available to the borrower an agreed sum of money for an agreed period of time and under which the borrower is obliged to repay that amount within the agreed time.
Mezzanine or hybrid financing	Type of high-yielding debt finance often seen in leveraged buy-out transactions and often featuring an option or right to acquire shares in a firm at a preferential rate. Mezzanine finance often takes the form of subordinated convertible loans.
Microcredit	Small loans (usually up to EUR 25 000) granted to micro-enterprises (as defined by the EU) and people sometimes excluded from access to finance, often provided short term and with no or low collateral required. Usually, micro-enterprises obtain free business advisory and mentoring as well.
Replacement, rescue/ turnaround and buyout capital	Minority stake purchase of existing shares in a company from another equity investment organisation or from another shareholder or shareholders. Financing made available to an existing business in difficulty, with a view to reestablishing prosperity. In finance, a buyout is an investment transaction by which the ownership equity of a company, or a majority share of the stock of the company is acquired. The buyer thereby 'buys out' the present equity holders of the target company.
Risk premium	A risk premium is the return in excess of the risk-free rate of return that an investment is expected to yield. An asset's risk premium is a form of compensation for investors who tolerate the extra risk - compared to that of a risk-free asset - in a given investment.'
Short-term loans, bank overdrafts and credit lines	A short term agreement which obliges the lender to make available to the borrower an agreed sum of money for an agreed period of time and under which the borrower is obliged to repay that amount within the agreed time.
Venture capital	A specialist form of equity finance provided to new, small or risky firms.

1 – Business structure and environment

(1) In which region is your business based?

....

(2) In which agricultural sector do you primarily operate?

- ☐ Field crops
- ☐ Granivore
- ☐ Dairy
- ☐ Viticulture
- ☐ Other permanent crops
- ☐ Horticulture
- ☐ Grazing livestock
- ☐ Mixed production
- ☐ Other: ____________________

(3) How many people (headcount)* do you currently employ in full time equivalents? * excluding the owner and unpaid workers

- ☐ 0
- ☐ less than 5
- ☐ 5 to 19
- ☐ 20 to 49
- ☐ 50 to 249
- ☐ 250 or more

(4) How long have you been active in the sector?

- ☐ less than 3 years
- ☐ 3 to 10 years
- ☐ more than 10 years

(5) What is the current stage of development?

- ☐ Seed [business model created, no commercial production]
- ☐ Start-up [prospecting, production not commercialised]
- ☐ Post-creation [activities started, no profits]
- ☐ Expansion/development [development of profitable activities]
- ☐ Mature [stable commercial activities with low or no growth]
- ☐ Redeployment
- ☐ Buyout/transmission

(6) Please provide us with the following financial information for the last three years?

Type	Amount (in EUR '000)
Sales	
Cash	
Total Assets	
Total Long-Term loans	
Total Short-Term loans	
Grants	
Proportion of domestic market as compared to international market (% of sales)	

2 – Status quo of financing of the business

(7) Did you look for external finance over the last three years?

☐ Yes ☐ No >> Block 3

(8) What were the reasons/needs for the financing you sought in the last three years?

☐ Finance working capital
☐ Ensure debt consolidation
☐ Acquire another company
☐ Acquire farm land/building
☐ Acquire machinery/equipment
☐ Launch a new product/service
☐ Develop international activities/enter a new market (geographic expansion)
☐ Finance export sales
☐ Finance R&D and innovation

(9) Over the last three years, please estimate the share of the following sources of finance

	0%	1-25%	26-50%	51-75%	> 75%
Short-term loans, bank overdrafts and credit lines	☐	☐	☐	☐	☐
Long & medium-term loans	☐	☐	☐	☐	☐
Non-profit stakeholder; family/friend loans	☐	☐	☐	☐	☐
Private grants or donations	☐	☐	☐	☐	☐
Government grants	☐	☐	☐	☐	☐
Leasing/renting finance	☐	☐	☐	☐	☐
Factoring	☐	☐	☐	☐	☐
Guarantees (including export guarantees)	☐	☐	☐	☐	☐
Venture capital	☐	☐	☐	☐	☐
Replacement, rescue/turnaround and buyout capital	☐	☐	☐	☐	☐
Mezzanine or hybrid financing	☐	☐	☐	☐	☐
Microcredit	☐	☐	☐	☐	☐

(10) How did the following factors change for your business over the last three years?

	Much worse	Worse	Unchanged	Better	Much better	No opinion
The financial situation	☐	☐	☐	☐	☐	☐
The cost (interest and other) of obtaining finance (better = cheaper)	☐	☐	☐	☐	☐	☐
The debt/turnover ratio	☐	☐	☐	☐	☐	☐
Other terms or conditions of finance (e.g. loan maturity, collateral levels, covenants, guarantee conditions, duration, etc.)	☐	☐	☐	☐	☐	☐
The burden of effort of obtaining finance	☐	☐	☐	☐	☐	☐
The willingness of commercial banks to provide finance	☐	☐	☐	☐	☐	☐

(11) Did you experience changes in commercial bank financing terms and conditions in the past 12 months?

	Increased	Unchanged	Decreased	No opinion
Interest rates	☐	☐	☐	☐
Cost of financing (other than interest rate)	☐	☐	☐	☐
Size of the loan/credit line	☐	☐	☐	☐
Maturity of the loan	☐	☐	☐	☐
Collateral requirements	☐	☐	☐	☐
Loan covenants/Information requirements, etc.	☐	☐	☐	☐

(12) To what extent did you feel comfortable in fulfilling the following requirements?

	Felt comfortable	Needed assistance	Had no capacity
Filling in application forms	☐	☐	☐
Providing administrative information	☐	☐	☐
Meeting specific requirements	☐	☐	☐
Preparing your business plan	☐	☐	☐

(13) To what extent do you face a lack of transparency or scarce information when looking for finance?

....

(14) Considering all kinds of financing, to what extent are the complexity and the cost of procedures a barrier to asking for financing?

....

2.1 – Demand for agricultural financing: Loans

(15) Did you try to access loan funding over the last three years?

☐ Yes ☐ No >> Block 2.2

(16) How much loan funding did you SEEK in the last three years?

Amount in '000 EUR	

(17) How much loan funding did you OBTAIN during the last three years?

Amount in '000 EUR	

(18) How much loan funding (in Euro) did PLAN BUT NOT APPLY for because you expected rejection, during the last three years?

Amount in '000 EUR	

(19) Over the last three years, how did you guarantee your loan?

☐ Owner collateral ☐ Family and friends ☐ Business collateral ☐ Business partners ☐ Mutual guarantee schemes such as cooperatives	☐ Other guarantee schemes fully or partly provided by government (any level) ☐ Financial institution ☐ Not Applicable: Our business did not guarantee its main loan in these years

(20) How successful were you in obtaining loan finance from each of the following sources over the last three years? (tick only those that you tried to obtain)

	Successful	Partially Successful	Unsuccessful
Commercial banks	☐	☐	☐
Farmers' cooperative banks	☐	☐	☐
Mortgage institutions	☐	☐	☐
Government credit institution	☐	☐	☐
Suppliers	☐	☐	☐
Others (Informal)	☐	☐	☐

(21) Why did you NOT OBTAIN the loan finance you applied for? (multiple answers possible)

Reason	1	2	3	4	5
Insufficient income	☐	☐	☐	☐	☐
Lack of credit history	☐	☐	☐	☐	☐
Lack of collateral	☐	☐	☐	☐	☐
Investment risks considered too high	☐	☐	☐	☐	☐
Bank policy (e.g. limits on lending to farmers)	☐	☐	☐	☐	☐
Investment considered economically unviable	☐	☐	☐	☐	☐
Underlying business plan not considered adequate	☐	☐	☐	☐	☐
I don't know			☐		
Other (state reason):					

Rejection ranking from 1 = Most – 5 = Least often the case for rejection
Adapted from: No 33, January 2013 Kristina Hedman Jansson, Chelsey Jo Huisman, Carl Johan Lagerkvist and Ewa Rabinowicz (Agricultural Credit Market Institutions, A Comparison of Selected European Countries)

(22) Did you have to meet any of the following requirements in order to obtain the loan?

	No	Yes, it was not difficult	Yes, it was difficult	I don't know
Provide a business plan and/or a financial plan	☐	☐	☐	☐
Provide PRIVATE assets as collateral	☐	☐	☐	☐
Provide BUSINESS assets as collateral	☐	☐	☐	☐
Sign a personal guarantee (e.g. allow the financial institute to go after personal assets to collect money, if a business loan cannot be repaid)	☐	☐	☐	☐
Accept a loan covenant (e.g. a restrictive covenant in a loan agreement that limits the borrower's freedom to incur more debt, etc.)	☐	☐	☐	☐

(23) What is/was the payback period (maturity) of the loan?

☐ 1 year or less	☐ More than 3 years, but less than 10 years
☐ More than 1 year, but less than 3 years	☐ More than 10 years

2.2 – Demand for agricultural financing: Equity

(24) Did you try to access equity financing in the past three years?

☐ Yes ☐ No >> Block 3

(25) How much equity financing did you SEEK during the last three years?

Amount in '000 EUR	

(26) How much equity financing (in Euro) did you OBTAIN during the last three years?

Amount in '000 EUR	

(27) How much equity financing did you PLAN BUT NOT APPLY for because you expected rejection, during the last three years?

Amount in '000 EUR	

(28) How successful were you in obtaining equity financing from each of the following sources over the last three years? (tick only those that you tried to obtain)

	Successful	Partially Successful	Unsuccessful
Existing shareholders	☐	☐	☐
Directors not previously shareholders	☐	☐	☐
Other employees of the business	☐	☐	☐
Venture capital funds i.e. capital provided by investors acting together in a fund set up for the purpose of providing finance to start-up and small businesses	☐	☐	☐
Business angels (usually individuals) who provide capital for a business start-up, usually in return for owning part of the business	☐	☐	☐
Mezzanine or hybrid financing i.e. loan financing that gives the lender the right to convert to an equity interest in the business if the loan is not fully repaid on time	☐	☐	☐
Other financial institutions e.g. finance houses and subsidiaries of commercial banks	☐	☐	☐
Other businesses	☐	☐	☐
Government	☐	☐	☐
Other equity finance provider	☐	☐	☐
Family, friends or other individuals, none of the above	☐	☐	☐

(29) When asking for equity financing during the last three years, according to you, what were the reason(s) for not getting financing?

- ☐ The financial situation of your business
- ☐ The cost of obtaining finance for your business
- ☐ The debt/turnover ratio of your business
- ☐ Other terms or conditions e.g. type of share, valuation and milestones, dividend rights, liquidation preference
- ☐ The burden or effort of obtaining finance for your business
- ☐ The lack of capability of your team to find the best option
- ☐ The lack of equity investors
- ☐ The difficulty for you to fulfil the applications requirements
- ☐ The lack of willingness of investors to provide finance
- ☐ Not Applicable: Our business did not experience any difficulty

3 – Future demand for financing

(30) Will you apply for repayable or non-repayable financing from a sector specific public or private financing body in the next 6 months?

☐ Yes ☐ I don't know >> End of Survey ☐ No >> End of Survey

(31) How much do you envisage asking for in the NEXT 12 months?

	Amount in '000 EUR
Short-term loans, bank overdrafts and credit lines	
Medium and long-term loans	
Non-profit stakeholder; family/friend loans	
Private grants or donations	
Government grants	
Public institutions supporting investments (through commercial banks, for instance interest subvention)	
Leasing/renting finance	
Factoring	
Guarantees (including export guarantees)	
Equity	
Replacement, rescue/turnaround and buyout capital	
Mezzanine or hybrid financing	
Not applicable	>> End of survey

(32) What is the purpose of this funding? Tick all that apply

☐ Finance working capital	☐ Launch a new product/service
☐ Ensure debt consolidation	☐ Develop international activities/enter a new market (geographic expansion)
☐ Acquire another company	☐ Finance export sales
☐ Acquire land/building	☐ Finance R&D and innovation
☐ Acquire machinery/equipment	

A.4 Calculation of net present values for indicators of quantitative value added

Quantitative value added of a fixed interest rate subsidy scheme (considered to be grant)

	Debt value	Interest payment	Repayment	Annual Payment	Subsidy element	Present value of the subsidy elements
Year	Debt value – repayment	Debt value * Interest rate	Fixed	Interest payment + Repayment	Annual payment – Repayment	Subsidy element/(1 + Interest rate) per year
Scenario 'Developed'						
Value date	30 000.00					
1	27 000.00	1 500.00	3 000.00	4 500.00	1 500.00	1 500.00
2	24 000.00	1 350.00	3 000.00	4 350.00	1 350.00	1 285.71
3	21 000.00	1 200.00	3 000.00	4 200.00	1 200.00	1 088.44
4	18 000.00	1 050.00	3 000.00	4 050.00	1 050.00	907.03
5	15 000.00	900.00	3 000.00	3 900.00	900.00	740.43
6	12 000.00	750.00	3 000.00	3 750.00	750.00	587.64
7	9 000.00	600.00	3 000.00	3 600.00	600.00	447.73
8	6 000.00	450.00	3 000.00	3 450.00	450.00	319.81
9	3 000.00	300.00	3 000.00	3 300.00	300.00	203.05
10	0.00	150.00	3 000.00	3 150.00	150.00	96.69
					8 250.00	7 176.53

Scenario 'Transition'						
Value date	56 000.00					
1	50 400.00	2 800.00	5 600.00	8 400.00	2 800.00	2 800.00
2	44 800.00	2 520.00	5 600.00	8 120.00	2 520.00	2 400.00
3	39 200.00	2 240.00	5 600.00	7 840.00	2 240.00	2 031.75
4	33 600.00	1 960.00	5 600.00	7 560.00	1 960.00	1 693.12
5	28 000.00	1 680.00	5 600.00	7 280.00	1 680.00	1 382.14
6	22 400.00	1 400.00	5 600.00	7 000.00	1 400.00	1 096.94
7	16 800.00	1 120.00	5 600.00	6 720.00	1 120.00	835.76
8	11 200.00	840.00	5 600.00	6 440.00	840.00	596.97
9	5 600.00	560.00	5 600.00	6 160.00	560.00	379.03
10	0.00	280.00	5 600.00	5 880.00	280.00	180.49
					15 400.00	13 396.20
Scenario 'Less-developed'						
Value date	80 000.00					
1	72 000.00	4 000.00	8 000.00	12 000.00	4 000.00	4 000.00
2	64 000.00	3 600.00	8 000.00	11 600.00	3 600.00	3 428.57
3	56 000.00	3 200.00	8 000.00	11 200.00	3 200.00	2 902.49
4	48 000.00	2 800.00	8 000.00	10 800.00	2 800.00	2 418.75
5	40 000.00	2 400.00	8 000.00	10 400.00	2 400.00	1 974.49
6	32 000.00	2 000.00	8 000.00	10 000.00	2 000.00	1 567.05
7	24 000.00	1 600.00	8 000.00	9 600.00	1 600.00	1 193.94
8	16 000.00	1 200.00	8 000.00	9 200.00	1 200.00	852.82
9	8 000.00	800.00	8 000.00	8 800.00	800.00	541.47
10	0.00	400.00	8 000.00	8 400.00	400.00	257.84
					22 000.00	19 137.42

Interest rate: 5% p.a.; proportional repayment rate: 10% p.a.

Revolving loan given from the EAFRD, one new investment cycle per year

	Debt value	Interest payment	Repay-ment	Annual Payment	Reinvest-ment	Present value of the rein-vestment	Present value of the subsidy
Year	Debt value – repay-ment	Debt value * Interest rate	Fixed	Interest payment + Repay-ment	Annual payment – Interest payment		Annual payment – Reinvest-ment
Scenario 1							
0	30 000.00						
1	27 000.00	1 500.00	3 000.00	4 500.00	3 000.00	3 000.00	0.00
2	24 000.00	1 350.00	3 000.00	4 350.00	3 000.00	2 857.14	142.86
3	21 000.00	1 200.00	3 000.00	4 200.00	3 000.00	2 721.09	278.91
4	18 000.00	1 050.00	3 000.00	4 050.00	3 000.00	2 591.51	408.49
5	15 000.00	900.00	3 000.00	3 900.00	3 000.00	2 468.11	531.89
6	12 000.00	750.00	3 000.00	3 750.00	3 000.00	2 350.58	649.42
7	9 000.00	600.00	3 000.00	3 600.00	3 000.00	2 238.65	761 35
8	6 000.00	450.00	3 000.00	3 450.00	3 000.00	2 132.04	867.96
9	3 000.00	300.00	3 000.00	3 300.00	3 000.00	2 030.52	969.48
10	0.00	150.00	3 000.00	3 150.00	3 000.00	1 933.83	1 066.17
					30 000.00	24 323.47	5 676.53
Scenario 2							
0	56 000.00						
1	50 400.00	2 800.00	5 600.00	8 400.00	5 600.00	5 600.00	0.00
2	44 800.00	2 520.00	5 600.00	8 120.00	5 600.00	5 333.33	266.67
3	39 200.00	2 240.00	5 600.00	7 840.00	5 600.00	5 079.37	520.63
4	33 600.00	1 960.00	5 600.00	7 560 00	5 600.00	4 837.49	762.51
5	28 000.00	1 680.00	5 600.00	7 280.00	5 600.00	4 607.13	992.87
6	22 400.00	1 400.00	5 600.00	7 000.00	5 600.00	4 387.75	1 212.25
7	16 800.00	1 120.00	5 600.00	6 720.00	5 600.00	4 178.81	1 421.19
8	11 200.00	840.00	5 600.00	6 440.00	5 600.00	3 979 82	1 620.18
9	5 600.00	560.00	5 600.00	6 160.00	5 600.00	3 790.30	1 809.70
10	0.00	280.00	5 600.00	5 880.00	5 600.00	3 609.81	1 990.19
					56 000.00	45 403.80	10 596.20

Scenario 3							
0	80 000.00						
1	72 000.00	4 000.00	8 000.00	12 000.00	8 000 00	8 000 00	0.00
2	64 000.00	3 600.00	8 000.00	11 600.00	8 000.00	7 619 05	380.95
3	56 000.00	3 200.00	8 000.00	11 200.00	8 000.00	7 256.24	743.76
4	48 000.00	2 800.00	8 000.00	10 800.00	8 000.00	6 910.70	1 089.30
5	40 000.00	2 400.00	8 000.00	10 400.00	8 000.00	6 581.62	1 418.38
6	32 000.00	2 000.00	8 000.00	10 000.00	8 000.00	6 268.21	1 731.79
7	24 000.00	1 600.00	8 000.00	9 600.00	8 000.00	5 969.72	2 030.28
8	16 000.00	1 200.00	8 000.00	9 200.00	8 000.00	5 685.45	2 314.55
9	8 000.00	800.00	8 000.00	8 800.00	8 000.00	5 414.71	2 585.29
10	0.00	400.00	8 000.00	8 400.00	8 000.00	5 156.87	2 84313
					80 000.00	64 862.57	15 137.43

Interest rate: 5% p.a.; proportional repayment rate: 10% p.a.

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