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An Investment Initiative for Fiscally Constrained EU Member States - The Role of Synergetic Financial Instruments

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Abstract. The economy of the European Union has not recovered from the impact of the economic and financial crisis. Growth rates remain low and investment activity is weak. This questions current economic policies of the Economic and Monetary Union, known as austerity. In opposition to fiscal contraction measures, expansive fiscal action policies are often called for to initiate economic recovery. But the national interests of austerity's main proponent, performed in an asymmetric intergovernmental bargaining arena, render most of the proposed expansive action plans impossible and hence austerity is expected to prevail. The Juncker-Plan constitutes an expansive action plan which respects the restrictive budgetary rules. Nevertheless an investment volume of 315 billion Euro should be made available, enabled by 21 billion Euro of public money. The budget contribution should lever private funds by a multiplier of 15. The crucial factor of 15 rests on experience with Synergetic Financial Instruments which have been increasingly executed during the last budget period. This work assesses the impact of expansive public investment conducted through these Synergetic Financial Instruments and thus gathers information to undertake an appraisal of the Juncker-Plan, foremost of its crucial mechanisms and resulting numbers. By this, the potential of financial instruments as means of fiscal policy and the validity of the Juncker-Plan can be assessed.
Keywords. Economic and Monetary Union, austerity, fiscal policy, public investment, financial instruments, Juncker-Plan, European Fund for Strategic Investment.
JEL. G23, E61, E62, E65, G01, G11, H62, H63.

1. Introduction

Seven years after the beginning of the global financial and economic crisis the 2014 elections of the president of the European Commission (EC) were dominated by the repercussions of this turmoil. Electoral campaigns of both candidates, Jean-Claude Juncker and Martin Schulz, featured an explicit focus on growth and employment issues. The European Union's (EU) economy still suffers from the crisis's impact and shows only modest signs of recovery. The 2014-world economic outlook of the International Monetary Fund (IMF) exhibits this (IMF, 2014). Gross Domestic Product (GDP) growth in 2013 was nearly zero and stagnated in the second quarter of 2014 along with projections of slightly above one per cent of overall EU-28 GDP growth in 2014. Output is not on track with pre-crisis levels and the economic lull is illustrated by persistently low inflation rates, too. Inflation of 0.5 per cent is far below the official price stability target rate of the European Central Bank (ECB) (two per cent) and may indicate the

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danger of deflation. Overall, instead of indicating a recovery from the crisis, the economic projections for the EU are rather sobering. Recovery continues to be the core challenge of European policy, which was reflected by the electoral campaigns of both EC presidency candidates. This also sheds light on the question if previous economic policy action, based on the idea of fiscal contraction, contributed to recovery or if alternative ways, proposed mostly in form of expansive action, are more appropriate for recovery.

In the aftermath of the election, the Commission's new president, Jean-Claude Juncker, launched an initiative called "An Investment Plan for Europe". The Juncker-Plan promises to deploy substantial funds available for strategic investment. This expansive action policy is based on comparably few EU-budget resources which should lever a multiple of the initial funds. This mechanism rests on experience with financial instruments which use synergies between EU-budget programmes, multilateral lending institutions like the European Investment Bank (EIB) and private investors. This work assesses the impact of expansive public investment conducted through these Synergetic Financial Instruments (SFIs) and thus gathers information to undertake an appraisal of the Juncker-Plan.

The following methodology will be conducted. Section two illustrates the need for expansive fiscal action by reviewing the outcomes of recent EU economic policies, looking at the state of (public) investment in Europe and introducing the Juncker-Plan in detail. Section three examines if the EU investment architecture is an appropriate vehicle to conduct strategic investment. As a part of EU-level investment tools, SFIs will be analysed in section four. Section five draws inferences from this progressive way of fiscal policy about the reasonability of the Juncker-Plan and provides a critical assessment. This will be amended by alternative proposals to the critical aspects of the Juncker-Plan.

2. Recent EU Economic Policies

For a sound understanding of the topic, it's useful to clarify why an expansive action plan is needed. Recent changes in economic policy coordination within the Economic and Monetary Union (EMU) obviously failed to overcome the impact of the crisis. The European economic regime is shaped according to a mainstream economic belief, often called the New Consensus on Macroeconomics (NCM). Highly stylised, the cornerstones are an independent central bank focussing on price stability, a marginalised stance on fiscal policy which should primarily guarantee budgetary stability and the perception of a supply-side determination of economic activity, namely output and employment (Arestis & Sawyer, 2004; Sadeh & Verdun, 2009; Hein, et al., 2011; Scharpf, 2011). The EMU's design is sometimes also called the 'Brussel- Frankfurt Consensus' (Jones, 2013). This indicates the transfer of the German Bundesbank's historically rooted conduct of monetary policy, influenced by the economic concept of Ordoliberalism, to the European level. Core components are price stability, sound public budgets, supply-sided reforms shaping free, efficient markets and, with respect to European integration, national responsibility for fiscal issues (Featherstone, 2012; Bibow, 2013b; Boyer, 2013; Jones, 2013). Accordingly, the European Central Bank (ECB) is independent and its mandate is to guarantee stable prices. The European fiscal capacity is comparably weak and national budgets are subject to the Stability and Growth Pact (SGP). The SGP is concerned with coordination and mutual surveillance of fiscal policy and imposes (one-size-fits-all) thresholds to national public debt.

In the wake of the economic and financial crisis national public debt levels accelerated because governments took over private debt to dampen damage to the

real economy. In turn, government bond spreads rose in periphery countries due to a loss of confidence and panic inside financial markets, rendering the refinancing of governments impossible (De Grauwe & Ji, 2012, 2013a). The widespread interpretation of the crisis cited public profligacy as the main cause of the governments' inability to refinance their budgets, which is perceived as a fundamental mistake (Hein, 2012; Bellofiore, 2013; De Grauwe, 2013a). European decision-makers launched a series of rescue actions and reforms of the EMU framework to defend the common currency. On the one hand, liquidity was provided to countries under pressure by the build-up of country-specific, or EU-wide, bail-outs funds and the ECB's credible intervention in the government bond market as a quasi-lender of last resort. This eased government bond spreads' climax (De Grauwe, 2013b; Saka, et al., 2014). On the other hand, a series of reforms to the framework of fiscal coordination was launched. A revised SGP and the new Fiscal Compact comprised tightened budget rules, enforcement of sanctions, increased surveillance of fiscal policy and the introduction of technical indicators controlling for macroeconomic imbalances (Buti & Carnot, 2012). Overall these operations urge national governments to pursue fiscal contraction and supply-sided reforms to meet the objectives of the reformed EMU rules (Schilirò, 2013). Countries claiming bailout fund-benefits were subject to specific austerity programmes. Fiscal austerity for restoring budgetary stability is well suited to the NCM's attitude with the respect to government expenditure's effects on economic activity, like Briotti (2005) shows. As fiscal policy's impact on growth is perceived to be small, fiscal contraction should also have no big negative effects. Based on the assumption of Ricardian equivalence, budgetary stability supports restoring the confidence of financial markets. Together with supply-sided reforms, this strategy should help to reduce government bonds spreads and well- working markets should induce growth.

2.1. The Impact of Austerity

Recent economic developments in the Eurozone seem to contradict these assumptions. Austerity rather amplified recessionary developments. De Grauwe & Ji state: "The more intense the austerity, the larger the subsequent increase in debt-to-GDP ratios. (…) Thus, it can be concluded that the sharp austerity measures that were imposed by market and policy-makers' panic not only produced deep recessions in the countries that were exposed to the medicine, but also that up to now this medicine did not work." (2013a, p.37). Rising debt-to-GDP ratios revealed the difficulty of deleveraging in the absence of economic growth (Darvas & Pisani-Ferry, 2011) which became obvious when austerity measures did not overcome the credit crunch or lower the risk adversity of economic agents. Declining lending volumes of banks have had a negative effect on the real economy (Acharya, et al., 2014). Despite the intensity of austerity measures increasing in accordance with interest spreads, confidence was not restored. (De Grauwe & Ji, 2013a; 2013b). These pro-cyclical adjustment policies (Truger, 2014) can be called "The Self-Defeating Austerity Syndrome" (Independent Annual Growth Survey, 2012). This interpretation is sustained by the latest IMF data, revealing low inflation, persistently high government debt in crisis countries, weak investment activity, an ongoing credit crunch and little output growth for the EU (IMF, 2014). The negative impact of fiscal contraction was largely underestimated (IMF, 2012, 2014).

Public investment seems to be the most auspicious element of fiscal policy with regard to growth. There is a broad consensus that investment in human capital, infrastructure and research and development (R&D) leading to innovation are the most significant determinants in attaining a sustainable long-term growth path and

are of the utmost importance in raising the non-price competitiveness of uncompetitive member countries (Barro & Sala-i-Martin, 1994; Darvas & Pisani-Ferry, 2011; Seccareccia, 2012; Zachmann, 2012; Barbiero & Darvas, 2014). Darvas & Pisani-Ferry (2011) or Aiginger (2013) show that eastern and southern periphery countries have deficits in these three growth determinants. Also, expenditure on the determinants has been cut in these countries to meet budgetary rules (Barbiero & Darvas, 2014). The European Commission states: "Fiscal consolidation measures which began to be implemented at the end of 2010 have resulted in significant changes in the composition of public expenditure in a number of Member States. In particular, growth-friendly expenditure has been cut back disproportionately as part of fiscal consolidation measures." (2014e, p.140). Figure 1 displays how private and public investment rates both went down in the EU after fiscal consolidation measures were in place.

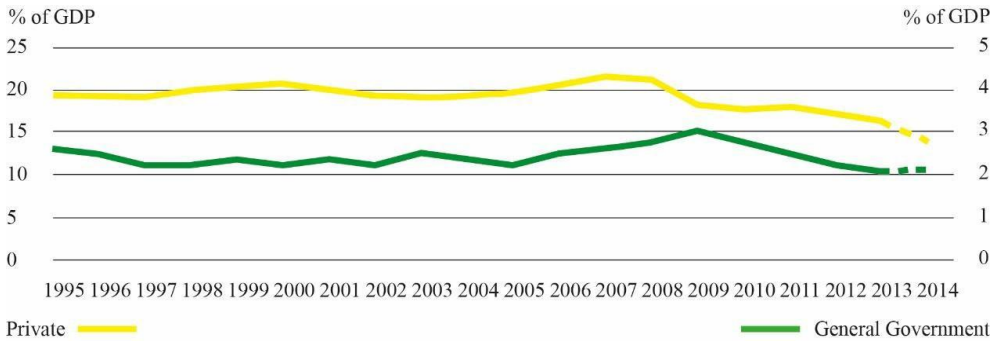

Figure 1. *Private and government gross fixed capital formation*
Source: (European Commission, 2014e, p.143)

2.2. The Moment for Expansive Public Investment

A long-lasting and controversial debate on the effect of expansive fiscal policy can be observed within the body of empirical literature. The discussion's focus is the size of the Keynesian multiplier. Empirical literature indicates that the Keynesian multipliers range between -0.2 and 5.5 percent, whereby most estimates range between 0.2 and 2.5 (Hemming, et al., 2002; Briotti, 2005; Fedelino & Hemming, 2005; Arslanalp, et al., 2010; Independent Annual Growth Survey, 2012). A recent work by 17 economists from North-American and European central banks proposes a multiplier of 1.5 for public investment (Coenen et al., 2012). The size of the multiplier is heavily dependent on, first, the economic circumstances under which fiscal policy is conducted and, second, which composition these policies feature. Multipliers are generally lower for tax changes, during times of economic prosperity or if they are long-term oriented. They are higher for expenditure changes, in times of economic slowdown and if short-term oriented. The economic context plays an important role. Several articles of Auerbach & Gorodnichenko (2012a; 2012b, 2013) show that multipliers are 2.5 percent during an economic slowdown and when the interest rate is close to zero. Also, the IMF recently corrected its multiplier's size within their models, most notably with regard to forecasted errors of the effects of past fiscal contraction measures (IMF, 2012; Blanchard & Leigh, 2013). In times of sluggish economic activity and especially if interest rates are close to zero, multipliers are above

1. All in all, empirical literature supports the assumption that fiscal policy is an appropriate way to generate growth, because the decisive characteristics of the current economic circumstances indicate a multiplier larger than 1.

Besides austerity not producing its intended results, empirical literature supports a significantly positive impact of expansive fiscal policy in the prevalent economic

environment of the EU. Public investment as the most growth-friendly expenditure should therefore be extended. Despite the fact that expansive fiscal measures would play a favourable role in a different economic policy mix, the heads of states and the EC do not depart from the path of austerity and alternative policies have to adhere to a number of restrictions. Therefore the role of austerity's most prominent proponent is important.

2.3. Restrictions to Expansive Action and The Juncker-Plan

Germany's economic philosophy is influenced by the concept of Ordoliberalism, entailing a laissez-faire market styled economy with a focus on currency policy (Bibow, 2013b). The statement "At it's most simplistic, the Bundesbank mantra holds that (price) stability causes growth." (Bibow, 2013b, p.14) expresses Germany's preferences. Political science analyses call this model 'conservative-corporatist' (Esping-Andersen, 1990), while economy-focused studies often use the term '(neo-) mercantilist' (Hein, 2012; Lucarelli, 2012; Bibow, 2013a). It aims at "macroeconomic stability, inclusive social policy and a sustained growth of industrial production" (Bonatti & Fracasso, 2013, p.1028). Common grounds are an export-led growth model underpinned by price stability, the upholding the manufacturing foundation in consent with a socially protected core workforce, an approach of competitiveness advantages possible through wage disinflation, sound public finance and flexibility on the firm level (Bonatti & Fracasso, 2013), while domestic demand is of minor importance (Bibow, 2012).

The German model is highly compatible with the NCM-styled EMU framework and its reliance on price stability and supply-sided determination of economic activity. A reversal of its historic ideology and a deterioration of its competitiveness through wage increases, fiscal expansion and higher inflation seem unlikely, most of all if this would be perceived to jeopardise its export capacity and position in the global economy. (Bibow, 2012; Bonatti & Fracasso, 2013). To uphold international competitiveness after its reunification and failure to meet SGP rules in the early 2000s, Germany undertook painful domestic supply-sided reforms. German authorities refer to its past adjustments when justifying and promoting a German-styled reform process for deficit countries, insisting that supply-sided reforms, underpinned by sound public finance to restore confidence of financial markets, are the most promising way of recovery (Weidmann, 2012; Schäuble, 2013).

Moravcsik (2012) shows that recent EMU policies are largely driven by German perceptions, which is grounded in the core country's bargaining position and higher relative power which was amplified by the dynamic of the crisis. As the greatest creditor for deficit countries, Germany has to ensure re-payment of debt and secure its guarantees, thereby ruling out the danger of moral hazard arising from the common belief that a Euro-breakup is not an option. Hence, tight budgetary rules for debtor countries provide security grounded on the rational deliberation of Germany. Scharpf (2014, p.11) supports this claim: "[…] the present euro- rescuing regime is institutionally entrenched as an extremely asymmetric intergovernmental negotiation system in which debtor governments have practically no bargaining power." Additionally, Germany profits from its safe-haven status, making very low domestic interest rates possible (Bibow, 2012). The complex picture of crisis management and reforms for prevention the breakup of the eurozone reflects Germany's reluctance toward financial transfer mechanisms, communalisation of public debt (Bonatti & Fracasso, 2013) or any major advances in fiscal integration (Boyer, 2013). Besides national responsibility for fiscal issues being a prominent ordoliberal principle (Featherstone, 2012), German public opinion opposes increased financial accountability and relaxation in terms of adjustment efforts of debtor countries by referring to their own

domestic reform process. This renders relaxed rules and deepened fiscal integration even more unlikely (Bonatti & Fracasso, 2013; Glencross, 2013). Hence, an investment initiative cannot be based on the relaxation of fiscal rules, higher inflation levels, wage increases in creditor countries or enhanced fiscal integration. Therefore, calls for a fundamentally different economic policy mix (Hein, Truger & van Treeck, 2011; Hein & Truger, 2013) or deepened fiscal integration in the form of new institutions taking up new -, or communalising existing debt (Dullien & Schwarzer, 2011; Bibow, 2013b; De Grauwe, 2013a; Pisani-Ferry, Vihriälä & Wolff, 2013) are reasonable, but, by now, rather improbable.

In November 2014 the Juncker-Plan (European Commission, 2014b; 2015) was presented as an initiative to give a growth impetus. According to the plan, a European-level fund is able to make 315 billion Euro of public and private money available in three years. The funds can be used for investment in strategically important areas, like R&D, education, competitiveness of small and medium sized enterprises (SMEs) and infrastructure. Simultaneously, the restrictive fiscal rules of the EMU shall be respected. A 16 billion Euro guarantee under the EU budget will be complemented by 5 billion Euro of EIB capital, forming a 21 billion Euro guarantee scheme. This scheme will back the newly set-up European Fund for Strategic Investment (EFSI) which operates at project-level. The fund is administered by the EIB and its purpose is the leverage of additional money. First, the EIB, by using the typical instruments, raises funds on capital markets as subordinated debt. Second, private investors, (public) lending institutions or member states are invited to participate (senior debt). The plan is rather unspecified at this point and offers no concrete advantages and possible consequences of this process (Horn et al., 2015).

Overall, the plan expects that the initial contribution can be multiplied by a factor of 15. See figure 2 for visualisation of functioning. The EFSI offers risk-finance and long-term investment support with a focus on SMEs. “The main idea is to provide greater risk-bearing capacity through public money in order to encourage project promoters and attract private finance to viable investment projects which would not have happened otherwise.” (European Commission, 2014b, p.6). A further component to reduce the barriers for investment is an attempt to channel the raised funds to the real economy by creating a task force which identifies viable projects (“project pipeline”) and by offering technical assistance (investment advisory hub). Additionally, the plan aims at improving the European regulatory environment, creating a Capital Markets Union which fosters long-term finance and, unsurprisingly, strengthening the Single Market. At the national level, the Juncker-Plan invites the member states to increase to use of SFIs within cohesion policy.

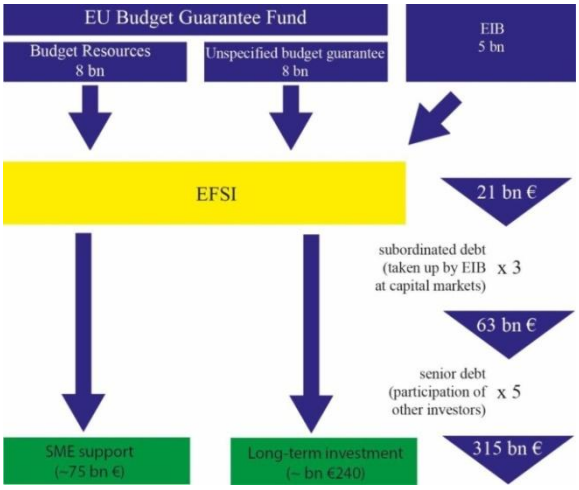

Figure 2. *The Juncker-Plan*
Source: *Author*

The discussion on the Juncker-Plan is not very extended and the plan is perceived rather with scepticism. Claeys et al. (2014) raise doubts on adequate selection of attractive projects by the authorities and Veugelers (2014) highlights the fact that shifting budget resources could create opportunity costs if other programmes in turn lack funds. Despite some short statements questioning the multiplier's size (Rabesandratana, 2014; Horn et al., 2015), insufficient attention is paid to experience with SFIs the Juncker-Plan refers to and builds on. Hence, starting from the question if it is appropriate at all to rely on EU-level instruments, the reasonability of the suggested mechanism and proposed numbers of resource volumes will be assessed by an extended analysis of the SFI-use, allowing for an appraisal of the Juncker-Plan. As both, SFIs and the ESFI, are EU-level investment tools, it is useful to examine, if EU-level investment is an appropriate way to support recovery and induce growth.

3. The EU Investment Architecture

As national fiscal leeway is restricted, the European fiscal capacity is the instrument left to act. The budget is organised as a seven-year Multiannual Financial Framework (MFF). The current framework lasts from 2014 until 2020 and its volume amounts to 1082,56 billion Euro (Council of the EU, 2013; EC, 2013a). The MFF is organised in six spending categories ('headings') of which heading 1 ('Smart and inclusive growth', with subheadings 1a 'Competitiveness for growth and jobs' and 1b 'Economic, social and territorial cohesion'), is the one concerned for public investment (total volume roughly 508,921 billion Euro). See Appendix 1 for programmes and concrete numbers.

Subheading 1a can be labelled 'direct budget support' or 'centrally managed'. It amounts to 142,130 billion Euro or 13.1 per cent of the whole budget. Programmes are under control of the EC and explicitly approach human capital, infrastructure and R&D/innovation by offering financial support to business. Subheading 1b is widely known as 'cohesion policy'. It is conducted via the Structural and Cohesion Funds which are under 'shared management'. They aim at "reducing disparities between the levels of development of the various regions" (EU, 2012a, Art. 174). Cohesion policy is perceived "to contribute – through investments into structural change – to reducing socio-economic differences" (Nyikos, 2013, p.164). As regional redistribution, channelled through growth-enhancing public investment, is the purpose of cohesion policy, assessments of

the EU's fiscal capacity primarily refer to this policy. Resources from the Structural and Cohesion Funds are managed by a national Managing Authority (MA). The MA selects national projects or portfolios and merges these into an Operational Programme (OP) which will be evaluated by the EC. The EC ultimately decides on the grants provided to the MAs and constantly monitors the process of spending. Eligibility for specific funds and subsequently allocated volumes depend on the member states' size and level of development (EC, 2014a). Project costs are never totally covered by EU grants, but have to be completed by national resources because "Support (…) shall not replace public or equivalent structural expenditure by a Member State." (EU, 2013c, Art. 96). This is the principle of additionality.

Similar to the discussion of fiscal policy, theoretical and empirical literature on the impact of cohesion policy is inconclusive (Allard, Choueiri, Schadler & Van Elkan, 2008; Marzinotto, 2012; Haisch, Müller, Primhak & Schneider-Sliwa, 2013; Nyikos, 2013). Regression-based econometric studies are rather ambiguous, while macro-model simulations show modest (Quest model) to substantial (Hermin model) positive impacts. Varga and in 't Veld (2010) review different models and elaborate a novel micro-founded general equilibrium model, based on the EC's Quest III model. They apply it to member states receiving most of cohesion spending.

Foremost, spending on infrastructure in the short-run as well as R&D and human capital in the medium and long run respectively, attain positive output effects. An example is given for Greece in figure 3.

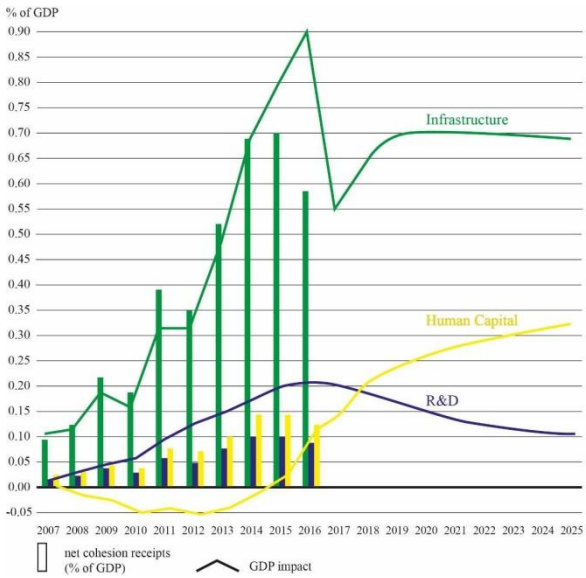

Figure 3. *Cohesion spending and output effect in Greece*
Source: Varga & in 't Veld (2010, p.43)

Financial appropriations generate growth on an equal scale. Cohesion policy's meaning for public investment also underlines its importance for growth creation. For example, figure 4 expresses the difference of public investment with and without cohesion spending and underlines the importance of EU budget expenditure in times of economic downturn. Healy & Bristow (2014) show that the economic and financial crisis reduced national resources available for co-financing Structural and Cohesion Fund-supported projects. The pressure on national budgets led to a temporary relaxation of the additionality-principle, so that 95 per cent of co-financing was allowed for member states under financial assistance. This came

along with prolonged availability of OP funds from the MFF 2000-2006, relaxation of rules of automatic de-commitment of appropriations after a certain period of non-spending as well as antedated payments for large projects to counter the impact of the crisis (Smail, 2010).

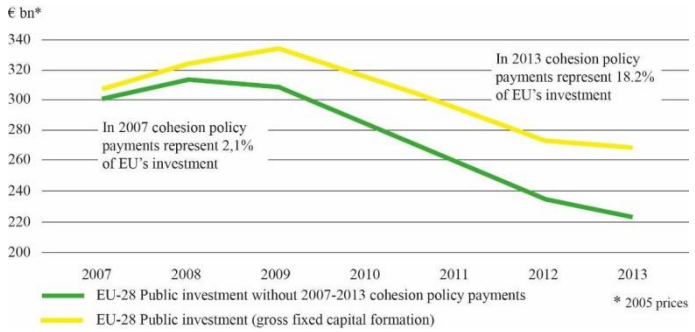

Figure 4. *Public investment with and without cohesion spending*
Source: (European Commission, 2014e, p.155)

Cohesion policy hence features flexibility to counter unanticipated developments and can play a vital role for economic recovery because it acts as an incentive to national authorities to uphold public investment (Alegre, 2010; Marzinotto, 2011a). Besides the impact on GDP, there are non-financial effects of cohesion policy amplifying the use of funds. An extensive study of ÖIR-Management Dienste (2007) gives evidence that cohesion policy positively affects strategic policy, institutional capacity building and societal cohesion building of Europe. This is sustained by econometric analysis (Rodríguez-Pose & Novak, 2013). Despite learning effects, weak administrative capacity and governance deficits curtail the effectiveness of cohesion policy. Low absorption and delays in spending are seen as the outcome of governance deficits and the main impediment to a more effective impact of cohesion policy (Marzinotto, 2011a; Haisch et al., 2013).

Another institution of concern for public investment activities is the EIB. It is the biggest multilateral lending institution in the world (Clifton, et al., 2013). The bank's owners are the 28 member countries. It holds subscribed capital of 243,284 billion Euro. The bank so far recorded surpluses and built up own funds of 58 billion Euro (EIB, 2013b). The EIB is autonomous, non-profit oriented and finances its activities on capital markets. In 2013, lending operations amounted to 64,019 billion Euro within the EU, and to nearly 300 billion Euro from 2009 to 2013 (European Investment Bank, 2013d). The EIB does not service its shareholder in the form of dividends and holds a triple-AAA credit ranking. Thus it borrows and lends at low cost, mostly long-term orientated, and by treaty provisions, its activities have to be in line with EU objectives (European Union, 2012a; European Investment Bank, 2013e). The EIB's main fields of action are financial assistance in less developed regions (European Investment Bank, 2013d) with respect to financing of SMEs, innovation projects, climate change action and infrastructure (Clifton, Fuentes & Revuelta, 2013), but also human capital (Tuijnman, 2009). The bank finances up to 50 per cent of total project costs which means that third parties, private or public, have to fill the remaining gap, similar to the additionality principle of cohesion policy.

Robinson's (2009) analysis shows EIB loans lever a great amount of additional resources to cover project costs, which often stem from public or private institutions. This is possible due to the bank's excellent credit ranking. Total volumes which are inflated through leverage of private funds are "far in excess of

the total budget of the EU" (2009, p.655). See Appendix II for concrete numbers. EIB activity gives incentive to national budget decisions and, by low interest rates and long-term orientation, enables projects which wouldn't be undertaken otherwise. By its size and lending practice the EIB takes on a quasi-fiscal role (Honohan, 1995). Above all, this supranational lending body plays an important role in mitigating informational deficits in credit markets, thus overcoming the credit crunch (Fedele, et. al., 2010). Comparable to cohesion policy, EIB activity has "important implications for the development of regional governance, building partnerships (…) and enhancing lessons drawing." (Robinson, 2009, p.666).

4. Combining Different Funding Components: Synergetic Financial Instruments

A small part of the EU budget is deployed for the use of SFIs. Most of these became operational in 2007, but have been used in previous MFF in minor ways. They attracted more attention as public budgets were obliged to do more with fewer resources. Officially, the EU defines SFIs as the following: ""financial instruments" means Union measures of financial support provided on a complementary basis from the budget in order 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." (European Union, 2012b, Art. 2). They combine prominent features of both, EU-budget support and EIB financial products. The outstanding feature of budget support is its capability to support, uphold and enhance public investment, and in turn growth. The exceptional feature of EIB activity is its ability to lever great amounts of resources from public and private bodies. Both elicit supplementary non-financial effects. Several extensive reports address SFIs and provide aggregated data. The following analysis draws on Núnez Ferrer et al. (2012), Robinson & Bain (2012), Spence et al. (2012), EIB (2013a), Núnez Ferrer & Katarivas (2014) and on a report of the EC (2014f) which all refer to SFIs in force during the MFF 2007-2013.

SFIs are funding instruments which conflate EU budget contributions with the characteristics of a financial product and offer financial assistance different from simple grant-giving. Grants can also be blended with financial instruments/SFIs established by associated financial institutions, for example the EIB (EU, 2012b). 24 SFIs were established during the past MFF, of which 13 were EU-internal instruments and 11 for activity outside of the EU. Despite they are interrelated and reinforce one another, they can be clustered according to the EU budget's division, central management (subheading 1a or direct budget support) and shared management (subheading 1b or cohesion policy). 9 centrally managed SFIs are EC controlled EU level funds, while SFIs under shared management can be divided into two groups: 4 promoting and assisting instruments, enhancing the use of small scale SFIs at the level of nationally controlled OPs.

Concrete management and implementation is delegated to an entrusted entity which is the financial intermediary the financial product stems from. Hence the EIB and the European Investment Fund (EIF) in most cases execute this task. But funds can be also provided to an ordinary commercial bank which is then obligated to channel the money to thematically agreed projects in line with the budget programmes' legislature. Figure 5 expresses the construction and mechanisms of SFIs in general, but the figure is also applicable to centrally managed SFIs. EU budget resources become financial products of various shapes and are directed via holding funds, financial intermediaries or directly to the beneficiary. Table 1 lists all SFIs under central management and exhibits their related field of investment

activity as well as the volume of funds which initially haven been allocated. Because implementation is delegated to EIB-bodies or other financial intermediaries to guarantee proper execution, SFIs contain monitoring and reporting obligations audited by the EC and the European Court of Audits. Furthermore, SFIs are similar but not equal to classic Public Private Partnerships (PPPs) on project level. SFIs can offer assistance to PPPs by providing a funding instrument above the project level where public and private funds are pooled. Only the provision of funds can be described as a 'partnership' but dispersion of resources to the beneficiary level is uncoupled of the claims of private investors and subject to European objectives. The third party participator is not integrated in "designing, building and operating (…) projects" (De Clerck, et al., 2012), like it is commonplace in ordinary PPPs.

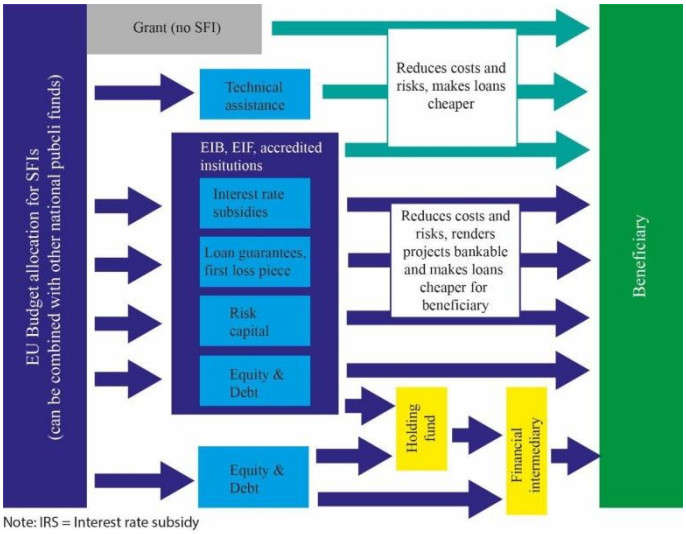

Figure 5. *The functionig of SFIs*
Source: Núnez Ferrer & Katarivas (2014, p.9)

Figure 6 explains the functioning of SFIs under shared management. Four instruments under shared management are technical assistance or promotion instruments called JESSICA, JEREMIE, JASPERS and JESSICA (JJJJs). They promote and assist small scale, project based SFIs at the level of OPs. These SFIs receive funding from the Structural and Cohesion Funds and from national resources. Funds are under the control of the national Managing Authority which performs the OP and allocates the funds towards SFIs. The financial instruments are set up by a financial intermediary and related to a specific project, unlike SFIs under central management. By the end of 2013, 941 specific SFIs within OPs had been established (EU, 2013c). Most of these financial products are concerned with SME-support.

Table 1. *Single SFIs under central management (Mio Euro)*

SFI	Field of action	Type of instrument	Budget contribution
High Growth & Innovative SME Facility (GIF)	SMEs (particularly innovative & R&D-related)	Equity investment / Venture capital	623
SME Guarantee Facility (SMEG)		Guarantee platform (for loans, equity, mezzanine, securitisation)	506
Risk Sharing Finance Facility (RSFF)	R&D	Risk-sharing	1000
Loan Guarantee Instruments for Trans-European Transport Network Projects (LGTT)	Infrastructure	Risk-sharing	500
Marguerite Fund	Infrastructure, Energy & Climate	Equity	80
European Progress Microfinance Facility (EPMF)	Micro-credit	Guarantee, Equity	100
Technology Transfer Pilot Project (TTP)	R&D	Equity	2
European Local Energy Assistance (ELENA)	Urban energy efficiency	Technical assistance	97
European Energy Efficiency Fund (EEEF)	Energy efficiency	Equity / Technical assistance	146,3

Source: Núnez Ferrer et al. (2012), Spence et al. (2012), Núnez Ferrer & Katarivas (2014)

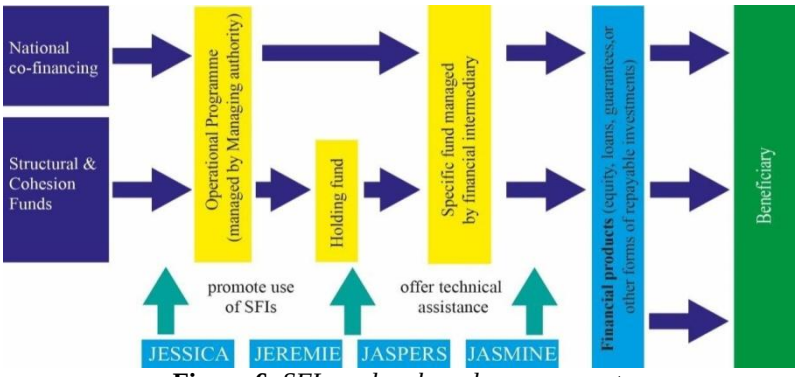

Figure 6. *SFIs under shared management*
Note: Graphic amended by author; Source: EC (2014f, p.13)

Table 2. *Single SFIs under shared management*

SFIs (share management	Field of action	Type of instrument	Budget contribution
Joint Action to Support Micro-finance Institutions in Europe (JASMINE)	Non-bank Micro-credit set-up	Technical assistance	5
Joint Assistance to Support Projects in European Regions (JASPERS)	Large-scale intrastructure projects	Technical assistance	35
Joint European Support for Sustainable Investment in City Areas (JESSICA)	Promotion of SFI set up & use (for urban development	Equity, loan, guarantees	63
Joint European Resources for Micro to medium Enterprises (JEREMIE)	Promotion of SFI use (for SME support)	Equity, loan, guarantees	700
941 SFIs within OPs	SME support	Equity, loan, guarantees etc.	9 597,62

Source: *(Núnez Ferrer and Katarivas, 2014; European Commission, 2014f)*

4.1. Economic Rationale

SFIs target structurally important areas of public investment and "could provide an important new financing stream for strategic investments, supporting long-term, sustainable investment at a time of fiscal constraint." (EC, 2011, p.3). They should address "market failures or sub-optimal investment situations, which have proven to be financially viable but do not give rise to sufficient funding from market sources." (EU, 2012b, Art. 140). SFIs shall increase the reach of the EU's fiscal policy in times of austerity and overcome symptoms of the crisis-induced credit crunch respectively approach the risk-aversion of economic actors by risk-bearing. SFIs go beyond ordinary grant allocation. EU budgetary resources are pooled with a financial product, open to the participation of other public or private investors. The involvement of a public institution (grant element) mitigates risk for investors and reduces the costs of setting up the instrument (Núnez Ferrer et al., 2012). Hence, the concrete project benefits from lower risk and faces lower costs of funding, especially important if the project "either does not generate sufficient revenue to cover the interests of a loan, or because the risks are too high according to the assessment of private investors." (Núnez Ferrer & Katarivas, 2014, p.8).

The loan element of SFIs assures financial discipline and encourages the productivity of a project. The instruments are designed to address market imperfections, if a project is risky or not bankable for private investors in times of mistrust, as well as encouraging the pooling of funds, hence making large-scale projects which wouldn't been undertaken by a single financial institution more viable. The risk-sharing character of SFIs increases their attractiveness and ultimately levers a multiple amount of the initial budget contribution from third parties. The leverage of a SFI is measured in a threefold way:

1. The initial EU budget contribution levers resources from SFI-associated institutions, like the EIB. This is the instrument leverage (IL). IL ratio = funds triggered by instrument from associated institutions / initial budget contribution.
2. The instrument further attracts funds from third parties (other public or private financial institutions or investors) which is the project leverage (PL). PL ratio = total funds / IL.
3. The comparison of total funding to the initial budget contribution is called the multiplier effect (ME). ME = total funds / initial budget contribution or IL ratio x PL ratio (Spence, et al., 2012).

The PL is the measure for the attractiveness of the instrument and builds upon the IL. The ME expresses the EU budget contribution's reach if pooled with an SFI, but it is "just one element of the overall measure of the impact of any given investment." (Núnez Ferrer et al., 2012, p.26). The actual investment volume at the beneficiary level can be different to the leverage ratio, as many SFIs are still running and actual investment also depends on demand or existence of appropriate projects. It represents the temporary status quo of SFIs' impact. SFIs generate revenues, receptive to re-use, which establish a revolving and thus sustainable character. The instruments are subject to different governance principles and are consistently monitored (EU, 2012b, Art.140). They should not substitute for national expenditure, so projects always have to be co-financed. SFIs must be in line with European objectives (European value added) which is difficult to define, but enhancing growth by public investment in structurally important areas according to empirical evidence can be considered sufficient. Besides, extensive risk-evaluation is unalterable to minimise risk exposure to the EU-budget contribution, whereas Spence et al. (2012) discern that SFIs do not imply more risk than simple grants.

4.2. Impact Assessment

Taking all SFIs (also externals) together, approximately 1.3 per cent of the MFF 2007-2013 resources were allocated to SFIs (Núnez Ferrer et al., 2012). The total volumes of SFIs under central management are listed in Table 2. An initial budget contribution of 3,064 billion Euro triggered available funds of 55,025 billion Euro of which actual investments at the beneficiary level amount to 30,923 billion Euro. This means an average ME of 18. It's difficult to generalise IL and PL due to inconsistent data in the available reports. In contrast to the final volumes of SFIs, the EIB-group contributions couldn't be reconstructed completely, but final numbers suggest that IL- and PL-ratios are actually higher than in Table 3, which features all SFI- programmes and its volumes. This is also the reason why equation IL x PL = ME is not correct on the aggregate level. Single instruments are of better explanatory power. R&D investment by SFIs is a good example for the potential of centrally managed SFIs. The Risk Sharing Finance Facility (RSFF) is targeted at risky innovation-projects and innovative SMEs and, in case of default, bears potential losses of investments. The RSFF levered great amounts of additional resources. Its multiplier is 16, which can be expressed as 1 billion EU budget resources attracted a further 1 billion Euro by the EIB and in 2010 total available funds reached 16,2 billion Euro (ME = 16.2) of which 4,8 billion Euro haven been disbursed to this point of time. Núnez Ferrer & Katarivas (2014) show that leverage effects tackle an important deficient of European R&D investment. Public government expenditure on R&D is comparable to innovation-leaders like Japan and the United States, but private risk-capital is lacking and innovations face difficulties to become profitable in sizable productions. The RSFF fills this gap by attracting and channelling private risk capital. Covering and spreading risk makes projects more bankable and "The RSFF has started at a moment where investment in R&D has been affected by the crisis, providing a welcome financial injection in an area of highest priority for the EU." (Núnez Ferrer & Katarivas, 2014, p.12).

The case of SFIs under shared management, particularly specific SFIs within OPs, is different and leverage of additional funds only reached low numbers. The summary report of the EC and an EIB-study (European Investment Bank, 2013a; European Commission, 2014f) show that 14,278 billion Euro of OP contributions were provided. 12,648 billion Euro became operational in 941 SFIs. Out of these, 7,929 billion Euro stem from the Structural and Cohesion Funds, and

4,217 billion Euro falls under additionality. Private participation occurs within national co-financing and, separately measured, by outside-OP contributions. But as only 45 SFIs received outside-OP funds, the aggregate leverage ratios of table 4 as a measurement of the instruments' mechanism are distorted.

Table 3. *SFIs programme volumes (central management)*

SFI (central management)	Budget contribution	EIB-Group contrubition	Total Leverange	Actual Investment
GIF	623	n.a.	2300 (ME=3,6)	1900
SMEG	506	n.a.	14200 (ME=28	9400
RSFF	1000	1000 (IL= 1)	16200 (PL=16,2; ME=16,2)	4800
LGTT	500	500 (IL=1)	20000 (PL= 40; ME= 40)	12000
Marguerite Fund	80	1000 (IL=1,25)	1500 (PL= 15; ME= 18,75)	780
EPMF	100	100 (IL=1)	225 (PL= 2,25; ME= 2,25)	178
TTP	2	n.a.	n.a.	n.a.
ELENA	97	n.a.	Ratio > 20 (expected)	1600
EEEF	146,3	75 (IL=0,51)	600 (PL= 8; ME= 4,1)	265
Total	3064,3	1775	55025	30923
Ø Leverange ratio		Ø IL= 0,92	ØPL= 16,3; ØME= 18	

Source: Núnez Ferrer et al. (2012), Spence et al. (2012), Núnez Ferrer & Katarivas (2014)

Table 4. *SFIs programme volumes (shared management)*

SFI (central management)	Budget contribution	EIB-Group contrubition	Total Leverange	Actual Investment
941 SFIs	7929,49 (initially allocated: 9597,62	4217304	432,39	6678,2
Total			12578,92	
Ø Leverange ratio		IL= 0,53	PL= 2,99 ME= 1,6	

Source: (European Commission, 2014f)

To get a more precise picture, one can look at the data given for these 45 SFIs. A 335,77 million Euro budget contribution was matched by 309,55 million Euro of national co-financing and levered 423,39 million Euro private capital. See figure 5 for details. This calculation will be helpful for an assessment of the future impact of SFIs under shared management. It is obvious that a crucial deficit of SFIs within OPs is the inability to lever private funds. This point will be taken up in the next sections. What can be stated is that the initial EU budget contribution of 7,929 billion Euro made 12,578 billion Euro available and triggered investments of 6,678 billion Euro at the beneficiary level as at the end of 2013.

Table 5. *SFIs within OPs exhibiting private participation*

SFIs (within Ops wich received external fund)	Budget contribution	National co-financing contribution	Total Leverange
42 SFIs	335,77	309,55	432,39
Total			1068,71
Ø Leverange ratio		IL= 0,92	PL= 3,45; ME= 3,16

Source*:* (European Commission, 2014f)

Measured against the EU-28 GDP in 2013 (EuroStat, 2014a), resources available for investment amount to about 67,603 billion Euro or 0.52 per cent of GDP and actual investment to 0,28 per cent of GDP. Given the small amount of deployed budget resources (0,09 per cent of GDP), the impact is significant. The findings of section 2.2 suggest that public investment in recessionary times causes a multiplier of above 1. Applying Coenen et al. (2012) who propose a multiplier of 1.5, the available investment volume of 67,603 billion Euro or 0.52 per cent of EU-28 GDP ultimately could raise this by 0.78 per cent. Overall, SFIs successfully address market failures and lever great amounts of additional resources from third parties. The public risk-bearing capacity and various financial products with public participation attract a multiple of the deployed resources. Investment is ensured to align with European objectives and target structurally important areas, so that SFIs are also able to guarantee long-term capital inflows for less developed member states by their revolving character, enhance non-price competitiveness as well as serve the implications of empirical analysis of section 2.2. SFIs do not interfere with the predominant paradigm of austerity as they do not increase public debt and therefore provide a possibility to circumvent the currently restrictive nature of the EMU.

Table 6. *Aggregated data and multipliers*

SFIs (aggregate)	Central management	Shared management (+JJJJs)
Budget contribution	3064,3	7929349 (+803) = 8732,49
Aviable funds	55025	12578,92
Ø ME	18	1,4
Total	67603,92	

Source: author's calculation based on cited reports (p.21)

4.3. Estimate of Future Volume

Volumes of funds allocated to SFIs are perceived to increase according to regulations of the most important subheading 1a-programmes for the MFF 2014-

2020. The Horizon 2020 regulation (EU, 2013b) for R&D and SME support establishes otherwise unspecified equity and debt instruments (successors of the RSFF) and allocated funds will be almost tripled. Infrastructure investment will be organised under the Connecting Europe Facility (CEF) (EU, 2013d) and not further specified equity and debt instruments (successors of the LGTT and the Marguerite Fund) can get up to 10 per cent of the CEF's resources. Support for innovative SMEs will be organised under the COSME programme (EU, 2013a) and comprise the Loan Guarantee Facility (LGF) and the Equity Facility for Growth (EFG) (successors of SMEG and GIF) which should closely interact with Horizon 2020. 60 per cent of the Competitiveness of Enterprises and SMEs (COSME) programme funds could be allocated towards the two SFIs. Appendix 3 provides conceivable amounts of subheading 1a-SFIs for the MFF 2014-2020.

With regard to cohesion policy (subheading 1b), SFIs are perceived to expand, too (EU, 2013c). Future allocations are impossible to assess, because it's upon the MA how many SFIs for which eligible projects will be set up and the process is highly demand-driven. Taking into account the deficiencies of the past MFF period, a further increase in numbers and leverage, as well as decreases in delays and unused funds can be expected. However, the most recent evaluation exhibits that funding and absorption continuously accelerated (European Commission, 2014f). Increased experience should lead to enhanced absorption of committed funds, whereas national co-financing is constant due to fiscal constraints. Additionally, it is conceivable that the SFIs' central mechanism, the leverage of private funds, becomes effective throughout all instruments due to learning effects. The assumption of general dispersion of leverage is reasonable against the backdrop of sustained risk aversion of investors and increased experience with SFIs within OPs. With the given information on allocations, the impact of SFIs during the next MFF can be assessed. For this, all funds for SFI-use out of authorised programmes originating in subheading 1a of the upcoming MFF (Appendix 3) will be the first component. The ratio of IL, PL and the ME from the old instruments (section 4.2) are projected on the new ones. Their values stay equal, as the inherent logic of SFIs remains the same. With regard to subheading 1b allocations, it is not possible to foresee how many funds will be allocated to SFIs within OPs over the next six years. Hence reliance on past experience seems the best option, so starting with numbers from table 4 and the number of initially allocated, but not fully absorbed funds (9597,62). The PL of the 45 SFIs which levered private funds (table 5) will be applied to all instruments to gauge the assumed dispersion of the leverage effect (PL*). By this, a ME of 1,66 emerges. Table 7 demonstrates the potential volumes of resources which are yet decided on, moreover amended by volumes building on numbers of the past MFF, adjusted by assumptions of higher absorption and leverage.

Table 7. *Aggregated data of future volumes of SFIs*

	Central management	Shared management
Budget contribution	7545,6	9597,62
Associated institutions / National co-fin.	≈ 7168,32	4680,58
Leverage ratios	IL ≈ 0,95; PL ≈ 16,3	IL= 0,48; PL*= 3,45
ME	18	1,66
Total available funds	135820,8	15932,1

Source: Author's calculation based on Appendix 3 and section 4.2

It's obvious that decided allocations of subheading 1a instruments considerably raise the impact of investment activity by SFIs in comparison to the past MFF by a tripling of the initial budget contribution and a constant leverage ratio. Regarding

subheading 1b instruments, the impact is bigger due to the dispersion of the PL to all SFIs. Taken together, future available funds would amount to 151,752 billion Euro.

Calculations of SFIs under central management consider allocations which are already known, but it is possible that more SFIs will be set up and those in testing (Project Bonds) become fully implemented. The success so far could raise attractivity, too, which is also not included here. Hence, the given volume depicts a minimum. Notwithstanding higher absorption and extension of the ME to all SFIs under shared management, the volumes above are also cautious calculations as the instruments seem attractive alternatives in times of suppressed fiscal capacity and shifts in a period of 6 years are possible, especially with regard to the fact, that left over resources from Structural and Cohesion Funds could be another source of funding.

5. Comparison and Critical Assessment

Experience shows that the functioning and the concrete numbers of the Juncker-Plan, the leverage of private funds by a factor of 15, are feasible in principle. The logic of the crucial mechanism, to offer public risk-bearing for attracting private funds, is sustained by the analysis of SFIs and hence a reasonable way to look for new sources of funding investments. The EFSI's targeting of investment fields and the provided financial products (European Commission, 2015) are congruent to the above presented analysis of SFIs-use. In terms of IL and PL, SFI analysis and the Juncker-Plan show differences in calculation. The ESIF as a whole is treated as the initial budget contribution. This includes the EIB participation of 5 billion Euro which is not treated as IL here. Ongoing from that, leverage is divided in the fund-raising activity of the EIB on capital markets as the IL (ratio = 3). This means the EIB is enabled for operations of 63 billion Euro, backed by the ESIF. In the second step the participation of private or other investing institutions appears as the PL (ration = 5). The plan remains vague on the concrete financial operations or about what is expected from this twofold strategy of fund raising. However, if the EIB participation for the creation of the 21 billion Euro budget guarantee scheme which backs the ESIF is counted as an initial budget contribution, the calculation reveals that the Juncker-Plan puts more weight on the shoulders of the EIB through the high IL (63 billion Euro taken up by ordinary EIB operations) and comparably low PL (PL ratio of 5). Criticism on the imprecise explanation of this part of the Juncker-Plan are comprehensible (Horn et al., 2015). But as the success of both steps of fund raising are dependent on the attractiveness of the public risk bearing capacity, the logic of the ESIF is comparable to SFIs.

By this, a multiplier of 15 is not unreasonable, but fits the past performance of SFIs under central management and exploits the synergies existing between EU budget support as well as EIB credit worthiness and implementation expertise. The implied centralisation of the plan through control of the EC seems appropriate, given the disappointing performance of SFIs under shared management. Foremost if SFI are executed and promoted by national authorities in countries with a weak administrative capacity.

Nevertheless, the instruments' attractiveness must be maintained for constant success. As this depends on risk aversion of investors who utilise risk-sharing with a public institution, SFIs attractiveness could diminish coincidently with risk aversion also declining during economic recovery (Cohn, et al., 2014). But as long as the economic outlook for the EU and particularly periphery countries is sobering, crisis induced capital flight and retrenched lending activity of commercial banks don't seem to reverse (Acharya et al., 2014). The economic environment is advantageous for the EFSI. The attractiveness of the EFSI depends

on how the risk-bearing is designed. The Juncker-Plan proposes first-loss or full guarantees (European Commission, 2015). Claeys et al. (2014) show that a first-loss guarantee significantly increases incentives for investors to participate. This is sustained e.g. by the RSFF, which bears risk also as a first-loss piece and exhibits a high multiplier. The higher the projects' risk, the more attractive is a first- loss guarantee. This leads to a another issue, the question of how to, on the one hand, properly select projects with an attractive risk character, and, on the other hand, avoid default but also windfall profits, which could occur if risk is lower and private investors would have undertaken the projects also without risk sharing (Horn et al., 2015). Politicised project selection is hence unfavourable (Claeys, Sapir & Wolff, 2014). The Juncker-Plan foresees a Steering Board consisting of the EC and EIB members, as well as seats for all kinds of EFSI-contributors to guarantee productive governance. The board should decide in consensus and a veto right is guaranteed to the EC and EIB.

The disappointing performance of SFIs under shared management highlights the SFIs' complexity and problems of integration of SFIs in the grant-based cohesion framework. The Juncker-Plan demands an enhanced use of SFIs within OPs, but does not include that in the calculation for the emerging investment volume for good reason. Further issues, also concerning SFIs under central management, arise from a lack of coherence and coordination between the instruments (Núnez Ferrer et al., 2012), questions of eligibility (European Court of Auditors, 2012) as well as from a trade-off between visibility and transparency (Robinson & Bain, 2012). All kinds of SFIs will undergo comprehensive restructuring and re-naming during the MFF 2014-2020. The EC proposes the general term 'equity and debt instruments' for all kinds of SFIs to introduce a standardised set of principles and rules, which can be seen as a reaction to difficulties performing SFIs in the regulatory framework of various budget programmes which creates unnecessary complexity (EC, 2011). Also, the Juncker-Plan recognises that the use of financial products is challenging and approaches this by the set-up of an investment advisory "Hub" which should offer technical assistance at all levels. Mutual learning and knowledge-sharing between public and private institutions is required to improve implementation and performance.

Another critical point to the Juncker-Plan is the endowment with- and origin of-resources apart from the EIB-contribution. A 16 billion Euro EU guarantee fund originating in the budget should back the EFSI. 50 per cent of that guarantee would be provisioned as real budget resources until 2020. These funds are shifted from Horizon 2020, the CEF and other unspecified budget margins. If already allocated resources for specific programmes or projects, which also yield returns, are taken away, an opportunity cost emerges (Veugelers, 2014). Especially, Horizon 2020 and the CEF are promising tools and it's not specified which parts will be abandoned in favour of the EFSI. To decrease the amount available for CEF-, or Horizon 2020- SFIs would be highly unreasonable (a reduction of the volumes in table 3 would be possible, especially funds are shifted away from SFI-use), the aggregate impact of EU budget support would not increase and, in the end, the plan could depict pure eyewash. The proposal regulation says: "Should the guarantee be called, the volume of guarantee would be reduced below the original EUR 16bn. However, future revenues due to the Union from the EFSI activities should be allowed to reinstate the EU guarantee up to this original amount." (European Commission, 2015, p.5). Hence, the EFSI's target leverage could be changed over time as it primarily depends on the initial budget security scheme.

Furthermore it is unclear if the proposed amount of funds can be gathered in three years. SFIs, like the RSFF, often need the full six years of the last MFF to attain the resulting multiplier. Funds were fed in on an annual basis and the

amounts differed from year to year (European Investment Bank, 2013c). But it is also possible that the great prominence of the EFSI and its high visibility could lead to faster leverage.

6. Alternative Ways of Funding

The question arises if there are possibilities left to financially underpin the ESIF as the planned endowment of the ESIF is questionable. The past negotiations on the EU budget showed no room for enlargement in times of austerity (Marzinotto, 2011b). An often recalled proposal to raise funds for economic recovery is the introduction of a Financial Transaction Tax (FTT).

The EC (2013b) proposes the introduction of a FTT with support of 11 member states which recently renewed their commitment for an introduction by 2016 (Council of the European Union, 2015). But the circle misses the most important European financial centre: the United Kingdom (UK) and London. Hence, the budget revenues generated by the tax are remarkably lower for only 11 member states than for the EU-28. However the budgetary revenue is estimated to between 30 and 35 billion Euro if a tax on shares and bond of 0.1 per cent and on derivatives of 0.01 per cent will be introduced (EC, 2013b). The question is how revenues will behave if international banks relocate transactions to their subsidiaries located in non-FTT countries. Despite this being un-assessable, it is possible to simulate different legal states of subsidiaries as Schulmeister (2014) does. The first scenario treats subsidiaries as incorporated in UK-law and thus not subject to a FTT (relocation effect). The second scenario assumes all subsidiaries as branches of their parent companies (no relocation effect). If all subsidiaries were subject to UK law, revenues for the 11 FTT-introducing member states still amount to 28.3 billion Euro (see Appendix 6). Recent literature rules out negative effects on growth and even suggests a positive impact on GDP (Griffith-Jones & Persaud, 2012). How can the newly generated funds support the Juncker-Plan? As the FTT probably won't be introduced in the EU-28, but only by 11 member states, national ownership of revenues comes into play. But the regulation proposal of the EC declares that "part of receipts generated by the FTT shall constitute an own resource for the EU budget." (European Commission, 2013b). Table 8 demonstrates that the overall share of national funds fed in SFIs is low given the amount of money allocated to grant giving through the structural and cohesion funds. As the ESIF can be expected to yield more success than SFIs under shared management, it should be considered to assign more national contributions to financial engineering instruments. FTT revenues could substitute for the EU budget resources the Juncker-Plan wants to shift in favour of the ESIF (which maybe dampens the budgets' overall impact) and be fed into the ESIF as national contributions. Besides, it is doubtful if the cohesion policy framework is adequate to execute the use of SFIs given the remarkable low multipliers (see table 6), it is therefore reasonable to direct national funds, generated by the FTT, towards a centrally managed funding instrument.

Another option to further increase the reach of EU expenditure is the expansion of EIB's lending capacity (Griffith-Jones & Cozzi, forthcoming). The last rise of EIB's capital by the member states of about 10 billion Euro in 2012 significantly increased the bank's lending activity (EIB, 2013b; EIB & EC, 2013). See figure 7 for changes of lending capacity. The EIB is able to offer 60 billion Euro more loans over three years (2013-2015) by a capital increase of 10 billion while maintaining its triple-A rating which depends on a ratio of bank's capital and its lending volumes (EIB & EC, 2013). The proposal of an further increase of EIB's capacity is supported by decisive voices in European economic decision making,

like Wolfgang Schäuble, the finance minister of Germany (Mussler, 2014), EIB president Werner Hoyer (Buergin, 2014) or EC's and European Parliament's heads, Jean-Claude Juncker and Martin Schulz (Traynor, 2014). Hence, the approach to again increase the EIB's capital by 10 billion Euro can be considered a realistic option.

It is speculative to which operating sites these new funds will be allocated to. After the 2012 capital increase a Joint EIB-EC report (EIB & EC, 2013) notifies that "the additional lending enabled by the capital increase is supporting viable projects within all Member States with a particular focus on (i) Innovation and skills; (ii) SME access to finance; (iii) Resource efficiency; and (iv) Strategic infrastructure." (EIB & EC, 2013, p.8). These will happen via the expansion of existing lending strategies, introduction of new initiatives, a strengthened risk capital mandate, amplified interaction with national public lending institutions, the project bond initiative and other already established risk-sharing SFIs. Overall, the report expresses the EIB's and EC's diversified strategy how to proceed with increased capacity.

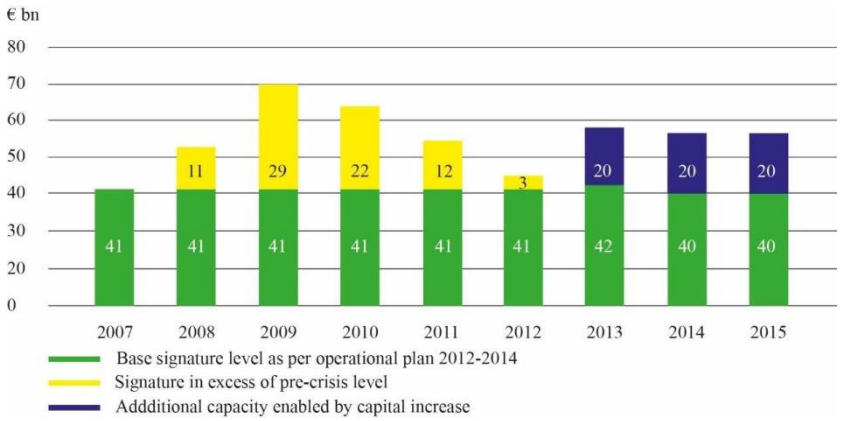

Figure 7. *EIB capital increase and lending capacity*
Source: (EIB & EC, 2013, p.8)

Table 8. *Member States' Contribution to SFIs*

Member State	National co-financing	Deviation until 2013	National funds allocated SFIs	
Germany	12200	+ 2% (12444)	525,9	4,4 %
Italy	31300	-37% (19719)	1523,3	7,73%
Spain	15000	-29% (10650)	271,72	2,56%
Austria	1150	+1% (1161,5)	5,27	0,4%
France	13900	-4% (13346)	92,09	0,7%
Estonia	450	0% (450)	75,33	
Greece	5700	-34& 3762)	279,78	
Belgium	2500	-12% (2200)	234,89	Ø 5,6%
Portugal	3600	-42% (2088)	110,70	
Slovakia	2000	+2% (2040)	16,73	
Slovenia	700	0% (700)	15,87	
Others			1065,46	n.a.
Total			4217,04	

Source: (European Commission, 2014f)

A report on behalf of the European Parliament investigating EIB co-financing practice concludes that EIB's "transition in terms of risk appetite has happened gradually, although the pace of evolution does appear to have hastened recently with the bank accepting more commercial risk today. However in most of its operations the EIB remains a very conservative lender." (Robinson & Bain, 2012, p.82). Also Núnez Ferrer et al. (2012, p.26) ascribe a "excessively stringent

interpretation of risk that impacts on the final leverage and multiplier effect" to the budget component of SFIs. Núnez Ferrer et al. (2012, p.27) further state: "A more reasonable risk assessment – even conservative – would considerably enhance the leverage and multiplier effect of the instruments." A gradual departure from restrained lending activity can be attested by a statement in the Joint EIB-EC report: "the Risk Capital Mandate was reinforced and established as an open ended" (EIB & EC, 2013). Hence, it seems a viable option to moderately take on more risk in the MFF 2014-2020 if a capital increase, again, improves the capital adequacy ratio of the EIB. The EIB's entrenched role in commercial bank-type activities, emerging through SFI-related investment and project based credit risk assessment (Robinson & Bain, 2012) hasn't had negative effects on its credit ranking, with especially "the EIB's capital buffer providing a significant cushion. Following the recent capital increase, the bank's Basel II capital adequacy ratio amounted to 28.7 per cent as of the end-2013 (compared to 23.1per cent at the end of 2012), which is high relative to the 8 per cent minimum for commercial banks." (Moody's Investors Service, 2014). Hence, the Juncker-Plan's intention to upgrade the role of the EIB also in terms of obligations to the capital markets would be solidly underpinned by a capital increase and the elevation must not deteriorate the EIB's paramount credit rating. Taken together, there is considerable room to magnify the volume of resources without increasing public debt. Both possibilities do not violate EMU budgetary rules or do not imply further transfer to, or liabilities, especially for periphery member states. Also the Juncker-Plan assures that the EC treats contributions to the ESIF benevolently with respect to public debt investigation. The EIB plays a conspicuous role in levering resources by enhancing creditworthiness and above all, in implementing SFIs. Therefore it is reasonable to expand its mandate.

7. Conclusion

The European economy is hallmarked by the ramification of the self-imposed fiscal constraint of national budgets and the inability of recovery from the economic crisis. Tight budgetary rules are likely to persist, as they fit the basic theoretical paradigm the EMU is built on and the perception of the most powerful negotiation party, Germany. But the fiscally constrained member states, foremost the periphery countries, need expansive economic policies to create a growth impetus. Such an initiative can only be placed within the current framework of fiscal coordination and surveillance and may not increase public debt levels. A pragmatic approach hence should recognise these restrictions and simultaneously achieve maximum impact in terms of well-targeted investment which promises to attain positive effects on growth in the current economic environment.

The Juncker-Plan is an initiative for investment activity acknowledging the EMU budgetary rules and proposing an EU-level investment vehicle. Suppressed national budgets shift the focus on the EU budget. Recent literature shows that the EU's fiscal capacity is appropriate to support economic recovery. Besides positive growth effects, it features the required flexibility to react to economic downturns. Also the EIB is successful in its lending operations and offers experience in long-term investment, leverage of additional funds and expertise in implementation of complex financial products. Hence, it is reasonable to rely on EU-level instruments.

The Juncker-Plan's very own purpose is the leverage of private funds by risk-bearing and – sharing. The volumes of funds raised for the EFSI depend on the multiplier effect, ergo the attractiveness of the financial product for investors and the potential projects. This mechanism builds on experience with SFIs. The

analysis of SFI-use during the last MFF allows for an examination of the Juncker-Plan's central number: the multiplier of 15. SFIs under central management, which means under control of the EC and EIB, attain convincing results. They lever great amounts of private funds by conflating EU budget resources with financial products. Especially first-loss risk sharing instruments experience significant participation of private investors and confirm that the multiplier's size of the Juncker-Plan is reasonable. As the EFSI dominating parties will be the EC and the EIB, efficient implementation can be expected. Project selection and technical assistance are the main challenges facing the EC and the EIB.

As the EFSI's purpose is to give security for project-investment it is problematic to supply the EFSI with an unspecified financial endowment. The guarantee scheme of the budget backing the ESFI is not properly specified, and the total leverage depicts rather a maximum. Failing projects and in turn potential calls on the guarantee scheme could diminish the volume of the guarantee. Additionally, the impact of the budget as a whole could be damaged if already allocated resources are shifted in favour of the EFSI. Especially, if SFIs, the parts of the budget with the highest return, will lack funds, shifting is undesirable. Hence, it is important to find alternative ways of increasing the solidity of the EFSI's financial backing. First, the FTT could depict a source of funding if the member states are willing to increase their support to progressive fiscal policy instruments. This is important against the background of the poor performance of SFI-use via cohesion policy and under managing participation of member states. Given the low leverage potential, it is worth to reconsider the operation of SFIs in cohesion policy at all. Second, the enhanced role of the EIB should be underpinned by a capital increase which gives the bank a solid financial foundation to execute more risky projects.

The experience with SFIs shows that the Juncker-Plan is no cloud-castle. But deficiencies of endowment of the investment initiative reflect that the Juncker-Plan is also no solution to the basic problems induced by austerity. To rely on progressive fiscal instruments can activate participation of private investors in growth-friendly economic areas and at least help to overcome the state of weak investment activity in Europe.

Appendixes

1. The MFF 2014-2020

(EUR million - current prices)

COMMITMENT APPROPRIATIONS	2014	2015	2016	2017	2018	2019	2020	Total 2014-2020
1. Smart and Inclusive Growth	**63.973**	**66.813**	**69.304**	**72.342**	**75.271**	**78.752**	**82.466**	**508.921**
1a: Competitiveness for growth and jobs	16.560	17.666	18.467	19.925	21.239	23.082	25.191	142.130
1b: Economic, social and territorial cohesion	47.413	49.147	50.837	52.417	54.032	55.670	57.275	366.791
2. Sustainable Growth: Natural Resources	**59.303**	**59.599**	**59.909**	**60.191**	**60.267**	**60.344**	**60.421**	**420.034**
of which: Market related expenditure and direct payments	44.130	44.368	44.628	44.863	44.889	44.916	44.941	312.735
3. Security and citizenship	**2.179**	**2.246**	**2.378**	**2.514**	**2.656**	**2.801**	**2.951**	**17.725**
4. Global Europe	**8.335**	**8.749**	**9.143**	**9.432**	**9.825**	**10.268**	**10.510**	**66.262**
5. Administration	**8.721**	**9.076**	**9.483**	**9.918**	**10.346**	**10.786**	**11.254**	**69.584**
of which: Administrative expenditure of the institutions	7.056	7.351	7.679	8.007	8.360	8.700	9.071	56.224
6. Compensations	**29**	**0**	**0**	**0**	**0**	**0**	**0**	**29**
TOTAL COMMITMENT APPROPRIATIONS	**142.540**	**146.483**	**150.217**	**154.397**	**158.365**	**162.951**	**167.602**	**1.082.555**
as a percentage of GNI	1,06%	1,05%	1,05%	1,04%	1,03%	1,03%	1,03%	1,04%
TOTAL PAYMENT APPROPRIATIONS	**135.866**	**141.901**	**144.685**	**142.771**	**149.074**	**153.362**	**156.295**	**1.023.954**
as a percentage of GNI	1,01%	1,02%	1,01%	0,96%	0,97%	0,97%	0,96%	0,99%
Margin available	0,22%	0,21%	0,22%	0,27%	0,26%	0,26%	0,27%	0,24%
Own Resources Ceiling as a percentage of GNI	1,23%	1,23%	1,23%	1,23%	1,23%	1,23%	1,23%	1,23%

Subheading 1a			Subheading 1b		
Programme	Investment category	Volume	Programme	Investment category	Volume
Connecting Europe Facility (CEF)	Infrastructure (energy, telecomm unication, transport)	21 936,76	Cohesion Fund (CF)	Investment according to national Operational Programmes (OPs)	74 928,36
Copernicus	Infrastructure	4 291,48	Less developed regions (ESF, ERDF)		185 374,42
Competitiveness of Enterprises	Competitiveness and	2 298,24	More developed regions (ESF, ERDF)		55 780,14
Erasmus+	Human Capital	14 774,52	Outermost and sparsely populated regions		1 562,99
Galileo	Infrastructure	7 071,73	Territorial cooperation		10 228,81
Horizon 2020	R&D	79 401,83	Transition regions		35 701,31
ITER	R&D	2 985,62	Youth employment initiative	Education	3 211,22

Excluded programmes: Customs, Taxation and Fight against Fraud (908,01), Employment and Social innovation Programme (7 057,69), Nuclear decommissioning assistance programmes (225,32). These programmes are excluded because they do not concern public investment categories.

2. EIB loans and leverage effect

	2004				2005				2006			
	Aggregated project cost	*Total approvals*	*%*	*implied leverage*	*Aggregated project cost*	*Total EIB approvals*	*%*	*implied leverage*	*Aggregated project cost*	*Total EIB approvals*	*%*	*implied leverage*
France	17,187.4	4,705.2	27.4%	3.7	17,233.7	4,611.3	26.8%	3.7	33,259.4	5,719.6	17.2%	5.8
Belgium	2,165.1	785.0	36.3%	2.8	3,152.9	1,154.2	36.6%	2.7	1,971.2	795.0	40.3%	2.5
Luxembourg	986.6	459.4	46.6%	2.1	132.7	65.6	49.4%	2.0	150.0	55.0	36.7%	2.7
Netherlands	1,786.3	647.6	36.3%	2.8	3,255.9	1,025.9	31.5%	3.2	5,139.4	1,405.0	27.3%	3.7
Germany	32,184.7	6,744.7	21.0%	4.8	20,708.4	7,064.8	34.1%	2.9	19,126.6	7,720.3	40.4%	2.5
Austria	2,882.9	965.6	33.5%	3.0	2,711.1	1,020.0	37.6%	2.7	3,433.7	1,350.0	39.3%	2.5
Bulgaria	160.0	50.0	31.3%	3.2	472.6	60.0	12.7%	7.9	1,165.0	430.0	36.9%	2.7
Spain	20,202.1	6,612.9	32.7%	3.1	19,621.1	7,358.3	37.5%	2.7	25,697.2	7,859.2	30.6%	3.3
Portugal	3,696.7	1,701.0	46.0%	2.2	6,176.1	1,651.3	26.7%	3.7	4,984.4	1,492.8	29.9%	3.3
UK	18,428.6	3,664.0	19.9%	5.0	25,197.7	4,742.8	18.8%	5.3	15,060.8	3,817.8	25.3%	3.9
Ireland	2,747.6	772.8	28.1%	3.6	2,803.9	1,050.0	37.4%	2.7	1,917.3	753.0	39.3%	2.5
Denmark	2,750.1	514.5	18.7%	5.3	173.3	86.6	50.0%	2.0	167.8	83.8	49.9%	2.0
Finland	1,975.8	662.1	33.5%	3.0	3,267.3	995.0	30.5%	3.3	1,821.6	670.0	36.8%	2.7
Italy	16,499.5	5,840.0	35.4%	2.8	18,878.0	6,466.3	34.3%	2.9	23,395.2	5,644.6	24.1%	4.1
Romania	1,408.4	410.6	29.2%	3.4	3,643.6	970.0	26.6%	3.8	2,473.1	1,023.0	41.4%	2.4
Slovenia	902.1	310.0	34.4%	2.9	2,776.3	387.0	13.9%	7.2	832.2	350.0	42.1%	2.4
Czech Republic	2,474.1	570.6	23.1%	4.3	9,235.7	971.3	10.5%	9.5	4,438.8	1,564.4	35.2%	2.8
Estonia					2,340.0	25.2	1.1%	92.8	50.0	15.0	30.0%	3.3
Greece	1,364.0	680.0	49.9%	2.0	3,245.8	1,518.0	46.8%	2.1	2,972.9	977.0	32.9%	3.0
Hungary	36,012.4	1,470.0	4.1%	24.5	4,382.7	806.7	18.4%	5.4	43,537.3	1,234.3	2.8%	35.3
Lithuania	128.0	43.0	33.6%	3.0	2,370.0	29.1	1.2%	81.3	50.0	5.0	10.0%	10.0
Latvia	1,150.0	180.0	15.7%	6.4	2,596.1	98.7	3.8%	26.3	122.0	41.0	33.6%	3.0
Poland	6,424.0	2,143.6	33.4%	3.0	8,602.9	2,654.9	30.9%	3.2	6,750.3	2,853.1	42.3%	2.4
Sweden	3,540.2	800.9	22.6%	4.4	1,934.5	535.1	27.7%	3.6	1,037.3	291.7	28.1%	3.6
Slovak Republic	2,483.2	244.0	9.8%	10.2	6,662.2	277.0	4.2%	24.1	1,526.8	464.0	30.4%	3.3
Cyprus	1,059.8	280.0	26.4%	3.8	220.0	110.0	50.0%	2.0	212.0	100.0	47.2%	2.1
Malta					130.9	13.0	9.9%	10.1				
Total	180,599.5	41,257.5	22.8%	4.4	171,985.4	45,747.9	26.6%	3.8	201,292.3	46,715.1	23.2%	4.3

3. MFF 2014-2020 estimates for SFIs' volume (central management) (Mio Euro)

MFF 2007-2013 instruments	MFF 2014-2020 instruments	Allocated budget resources
RSSF, GIF	Horizon 2020 □ Two instruments (equity and debt)	2 842,3
LGTT, Marguerite	CEF □ Two instruments (equity and debt)	3 324,3
SMEG	COSME – LGF & EFG	1 379
Total		7545,6

Source: European Union (2013a; b; d)

4. Scenarios of FTT introduction

	Subsidiaries in the UK treated as part of parent financial institutions No relocation effects				Subsidiaries in the UK treated as British financial institutions Including relocation effects			
	Exchange traded stocks&bonds	Exchange traded derivatives	OTC without Foreign exchange spot	Total	Exchange traded stocks&bonds	Exchange traded derivatives	OTC without Foreign exchange spot	Total
Germany	10,60	7,25	5,17	23,02	3,03	2,46	1,27	6,76
France	8,30	5,24	5,50	19,04	2,33	1,60	1,24	5,16
Italy	4,53	1,62	2,72	8,87	3,94	1,10	1,13	6,17
Spain	4,96	1,83	2,94	9,72	4,43	1,25	1,23	6,91
Belgium	1,12	0,48	0,49	2,08	0,59	0,22	0,22	1,02
Austria	0,64	0,30	0,29	1,23	0,35	0,16	0,21	0,72
Other FTTCs	0,91	0,54	0,43	1,89	0,73	0,42	0,40	1,55
11 FTTCs	31,05	17,26	17,53	65,84	15,39	7,20	5,70	28,30

References

Acharya, V., Eisert, T., Eufinger, C. & Hirsch, C., (2014). *Real Effects of the Sovereign Debt Crisis in Europe: Evidence from Syndicated Loans*. CEPR Discussion Paper No. DP10108. London: Centre for Economic Policy Research.

Aiginger, K. (2013). *A New Strategy for the European Periphery*. WIFO Working Paper No.443. Vienna: Österreichisches Institut für Wirtschaftsforschung.

Alegre, J. (2010). An evaluation of EU regional policy. Do structural actions crowd out public spending? *Public Choice*, 151(1-2), 1–21. doi. 10.1007/s11127-010-9731-5

Allard, C., Choueiri, N., Schadler, S. & Van Elkan, R., (2008). *Macroeconomic Effects of EU Transfers in New Member States*. IMF Working Paper WP/08/223. Washington D.C.: International Monetary Fund.

Arestis, P., & Sawyer, M. (2004). *Re-examining Monetary and Fiscal Policy for the 21st Century*. Cheltenham: Edward Elgar Publishing.

Arslanalp, S., Bornhorst, F., Gubta, S., & Sze, E., (2010). Public Capital and Growth. *IMF Working Paper*, WP/10/175. Washington D.C.: International Monetary Fund.

Auerbach, J., & Gorodnichenko, Y. (2012a). Fiscal Multipliers in Recession and Expansion. In: A. Alesina & F. Giavazzi, (eds), *Fiscal Policy after the Financial Crisis*. Cambridge: National Bureau of Economic Research, pp.63-98.

Auerbach, J., & Gorodnichenko, Y. (2012b). Measuring the Output Responses to Fiscal Policy. *American Economic Journal*, 4(2), 1-27. doi. 10.1257/pol.4.2.1

Auerbach, J., & Gorodnichenko, Y. (2013). Output Spillovers from Fiscal Policy. *American Economic Review*, 103(3), 41-146. doi. 10.1257/aer.103.3.141

Barbiero, F. & Darvas, Z., (2014). *In Sickness and in Health: Protecting And Supporting Public Investment in Europe*. Bruegel Policy Contribution Issue 2014/02. Brussels: Bruegel. Accessed, 5 Oct. 2014. [Retrieved from].

Barro, R., & Sala-i-Martin, X., (1994). *Economic Growth*. Cambridge: MIT Press.

Bellofiore, R. (2013). Two or three things I know about her': Europe in the global crisis and heterodox economics. *Cambridge Journal of Economics*, 37(3), 497–512. doi. 10.1093/cje/bet002

Bibow, J. (2012). *The Euro Debt Crisis and Germany's Euro Trilemma*. Levy Institute Working Paper No. 721. Annandale-on-Hudson: Levy Economic Institute.

Bibow, J. (2013a). *Germany and the Euroland Crisis: The Making of a Vulnerable Haven*. Levy Institute Working Paper No. 767. Annandale-on-Hudson: Levy Economic Institute.

Bibow, J. (2013b). *Lost at Sea: The Euro Needs a Euro Treasury*. Levy Institute Working Paper No. 780. Annandale-on-Hudson: Levy Economic Institute.

Blanchard, O., & Leigh, D. (2013). *Growth Forecast Errors and Fiscal Multipliers*. IMF Working Paper WP/13/1. Washington D.C.: International Monetary Fund.

Bonatti, L., & Fracasso, A. (2013). The German Model and the European Crisis. *Journal of Common Market Studies*, 51(6), 1023-1039. doi. 10.1111/jcms.12067

Boyer, R. (2013). The euro crisis: undetected by conventional economics, favoured by nationally focussed polity. *Cambridge Journal of Economics*, 37(3), 533-569. doi. 10.1093/cje/bet013

Briotti, M. (2005). *Economic reactions to public finance consolidation: a survey of the literature*. ECB Occasional Papers No. 28. Frankfurt am Main: European Central Bank. Accessed, 9 Dec. 2014. [Retrieved from].

Buergin, R. (2014). Schaeuble Says EU Growth Boost May Require EIB Capital Increase. *Bloomberg*. Accessed, 15 Jan. 2015. [Retrieved from].

Buti, M., & Carnot, N. (2012). The EMU Debt Crisis: Early Lessons and Reforms. *Journal of Common Market Studies*, 50(6), 899–911. doi. 10.1111/j.1468-5965.2012.02288.x

Claeys, G., Sapir, A., & Wolff, G. (2014). Juncker's investment plan: No risk – no return. Accessed, 15 May 2015. [Retrieved from].

De Clerck, D., Demeulemeester, E., & Herroelen, W. (2012). Public Private Partnerships: Look Before You Leap Into Marriage. *Review of Business and Economic Literature*, 57(3), 246-258.

Clifton, J., Fuentes, D., & Revuelta, J. (2013). *Financing Utilities: How the Role of the European Investment Bank shifted from regional development to making markets*. MPRA Paper No. 50557; *Utilities Policy*, 29, 63-71. doi. 10.1016/j.jup.2013.10.004

Coenen, G., Erceg, C., Freedman, C., Furceri, D., Kumhof, M., Lalonde, R., Laxton, D., Lindé, J., Mourougane, A., Muir, D., Mursula, S., de Resende, C., Roberts, J., Roeger, W., Snudden, S., Trabandt, M. & in 't Veld, J., (2012). Effects of Fiscal Stimulus in Structural Models. *American Economic Journal: Macroeconomics*, 4(1), 22–68. doi. 10.1257/mac.4.1.22

Council of the European Union, (2013). *COUNCIL REGULATION (EU, EURATOM) No 1311/2013 of 2 December 2013 laying down the multiannual financial framework for the years 2014-2020*. Brussels: Council of the European Union.

Council of the European Union, (2015). *PRESS RELEASE - 3310th Council meeting Economic and Financial Affairs*. Brussels: Council of the European Union.

Darvas, Z. & Pisani-Ferry, J. (2011). *Europe's Growth Emergency*. Bruegel Policy Contribution Issue 2011/13. Brussels: Bruegel. Accessed, 5 Oct. 2014. [Retrieved from].

Dullien, S. & Schwarzer, D. (2011). *Dealing with Debt Crisis in the Eurozone - Evaluation and Limits of the European Stability Mechanism*. SWP Research Paper 11. Berlin: Stiftung Wissenschaft und Politik.

Esping-Andersen, G., (1990). *The Three Worlds of Welfare Capitalism*. Cambridge: Polity Press.

European Commission, (2011). *A framework for the next generation of innovative financial instruments - the EU equity and debt platforms*. Communication from the Commission to the European Parliament and the Council. Brussels: European Commission.

European Commission, (2013a). Annex to the Communication from the Commission to the Council and the European Parliament. *Technical adjustment of the financial framework for 2014 in line with movements in GNI. (Article 6 of Council Regulation No 1311/2013 laying down the multiannual financial framework for the years 2014-2020).* Brussels: European Commission.

European Commission, (2013b). *Proposal for a Council Directive implementing enhanced cooperation in the area of financial transaction tax*. Brussels: European Commission.

European Commission, (2014a). *An introduction to EU Cohesion Policy 2014• -2020*. Brussels: European Commission. Accessed, 1 Dec. 2014. [Retrieved from].

European Commission, (2014b). Communication from the Commission to the European Parliament, the Council and the European Central Bank, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank - *An Investment Plan for Europe*. Brussels: European Commission.

European Commission, (2014c). Financial framework 2007 - 2013. Accessed, 3 Jan. 2015. [Retrieved from].

European Commission, (2014d). Programmes. Accessed, 3 Jan. 2015. [Retrieved from].

European Commission, (2014e). *Sixth report on economic, social and territorial cohesion*. Brussels: European Commission.

European Commission, (2014f). *Summary of data on the progress made in financing and implementing financial engineering instruments reported by the managing authorities in accordance with Article 67(2)(j) of Council Regulation (EC) No 1083/2006*. Brussels: European Commission - DG REGIO.

European Commission, (2015). *Proposal for a Regulation of the European Parliament and of the Council on the European Fund for Strategic Investments and amending Regulations (EU) No 1291/2013 and (EU) No 1316/2013*. Brussels: European Commission.

European Court of Auditors, (2012). *Financial Instruments for SMEs Co-Financed by the European Regional Development Fund*. Brussels: European Court of Auditors.

European Investment Bank, (2013a). *Financial Instruments: A Stock-taking Exercise in Preparation for the 2014-2020 Programming Period*. Luxembourg: European Investment Bank. Accessed, 27 Oct. 2014. [Retrieved from].

European Investment Bank, (2013b). *Financial Report 2013*. Luxembourg: European Investment Bank. European Investment Bank, 2013c. *Second Evaluation of the Risk Sharing Finance Facility (RSFF) - Final Report*. Operations Evaluation. Luxembourg: European Investment Bank.

European Investment Bank, (2013d). *Statistical Report 2013*. Luxembourg: European Investment Bank.

European Investment Bank, (2013e). *Statute and other Treaty provisions*. Luxembourg: European Investment Bank.

European Investment Bank and European Commission, (2013). *Increasing lending to the economy: implementing the EIB capital increase and joint Commission-EIB initiatives*. Joint Commission-EIB report to the European Council. [online] Luxembourg: European Investment Bank and European Commission. Accessed, 13 Jan. 2015. [Retrieved from].

European Union, (2012a). Consolidated version of the Treaty on the Functioning of the European Union. Brussels.

European Union, (2012b). Regulation (EU, EURATOM) No 966/2012 of the European Parliament and of the Council *of 25 October 2012 on the financial rules applicable to the general budget of the Union and repealing Council Regulation (EC, Euratom) No 1605/2002*. Brussels: European Parliament, Council of the European Union.

European Union, (2013a). Regulation (EU) No 1287/2013 of the European Parliament and of the Council *of 11 December 2013 establishing a Programme for the Competitiveness of Enterprises and small and medium-sized enterprises (COSME) (2014 - 2020) and repealing Decision No 1639/2006/EC*. Brussels: European Parliament, Council of the European Union.

European Union, (2013b). Regulation (EU) No 1291/2013 of the European Parliament and of the Council *of 11 December 2013 establishing Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020) and repealing Decision No 1982/2006/EC*. Brussels: European Parliament, Council of the European Union.

European Union, (2013c). 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. Brussels: European Parliament, Council of the European Union.

European Union, (2013d). *REGULATION (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility, amending Regulation (EU) No 913/2010 and repealing Regulations (EC) No 680/2007 and (EC) No 67/2010*. Brussels: European Parliament, Council of the European Union. EuroStat, 2014a. *GDP and main components - Current prices*. Brussels: EuroStat.

EuroStat, (2014b). *Government revenue, expenditure and main aggregates*. Brussels: EuroStat.

Featherstone, K. (2012). *Le choc de la nouvelle? Maastricht, déjà vu and EMU reform*. LEQS Paper No. 52/2012. London: London School of Economics and Political Science. Accessed, 23 Oct. 2014. [Retrieved from].

Fedele, A., Mantovani, A., & Luicci, F. (2010). *Credit availability in the crisis: which role for the European Investment Bank Group?*. Quaderni - Working Papers DSE No. 699. Bologna: University of Bologna - Department of Economic Science.

Fedelino, A., & Hemming, R. (2005). *A Fiscal Policy Framework To Safeguard Public Investment*. Rome: Banca d'Italia. Accessed, 3 Oct. 2014. [Retrieved from].

Glencross, A. (2013). *The EU Response to the Eurozone Crisis: Democratic Contestation and the New Fault Lines in European Integration*. Discussion Paper No 3/13. Hamburg: Europa- Kolleg Hamburg.

De Grauwe, P. (2013a). *Design Failures in the Eurozone: Can they be fixed?*. LEQS Paper No. 57/2013. London: London School of Economics and Political Science. Accessed, 27 Oct. 2014. [Retrieved from].

De Grauwe, P. (2013b). The European Central Bank as Lender of Last Resort in the Government Bond Markets. *CESifo Economic Studies*, 59(3), 520-535. doi. 10.1093/cesifo/ift012

De Grauwe, P., & Ji, Y. (2012). Mispricing of Sovereign Risk and Macroeconomic Stability in the Eurozone. *Journal of Common Market Studies*, 50(86), 866-880. doi. 10.1111/j.1468-5965.2012.02287.x

De Grauwe, P., & Ji, Y. (2013a). From Panic-Driven Austerity to Symmetric Macroeconomic Policies in the Eurozone. *Journal of Common Market Studies*, 51, 31-41. doi. 10.1111/jcms.12042

De Grauwe, P., & Ji, Y. (2013b). *The Legacy of Austerity in the Eurozone*. CEPS Commentary. [online] Brussels: Centre for European Policy Studies. Accessed, 12 Oct. 2014. [Retrieved from].

Griffith-Jones, S., & Cozzi, G., (2016). Investment-led growth: a solution to the European crisis. In: M. Mazzucato and M. Jacobs, eds., *Rethinking Capitalism*. New York: Wiley Publishers.

Griffith-Jones, S., & Persaud, A. (2012). *Financial Transaction Taxes*. Paper prepared for - and presented to - the Committee on Economic and Monetary Affairs of the European Parliament in 6th February 2012. Brussels. Accessed, 13 Jan. 2015. [Retrieved from].

Gros, D. (2012). *Macroeconomic Imbalance in the Euro Area: Symptom or cause of the crisis?*. CEPS Policy Brief No. 301. Brussels: Centre for European Policy Studies. Accessed, 23 Sep. 2014. [Retrieved from].

Haisch, T., Müller, U., Primhak, V. & Schneider-Sliwa, R. (2013). *Structured empirical analysis for convergence regions: identifying success factors for consolidated growth*. SEARCH - Targeted Analysis. Luxembourg: ESPON 2013 Programme. Accessed, 5 Oct. 2014. [Retrieved from].

Healy, A. & Bristow, G. (2014). *Economic Crisis and the Structural Funds*. [online] Luxembourg: ESPON 2013 Programme. Accessed, 5 Oct. 2014. [Retrieved from].

Hein, E., (2012). *The Crisis of Finance-dominated Capitalism in the Euro Area, Deficiencies in the Economic Policy Architecture, and Deflationary Stagnation Policies*. Levy Institute Working Paper No. 734. Annandale-on-Hudson: Levy Economic Institute.

Hein, E. & Truger, A. (2013). The crisis of finance-dominated capitalism in the euro area, deficiencies in the economic policy architecture, and deflationary stagnation policies. *Journal of Post-Keynesian Economics*, 36(2), 325-354.

Hein, E., Truger, A. & van Treeck, T. (2011). *The European Financial and Economic Crisis: Alternative Solutions from a (Post-)Keynesian Perspective*. IMK Working Paper No. 9/2011. Düsseldorf: Hans Böckler Stiftung - Insitut für Makroökonomie und Kunjunkturforschung. Accessed, 23 Jul. 2014. [Retrieved from].

Heipertz, M. & Verdun, A. (2010). *Ruling Europe: The Politics of the Stability and Growth Pact*. New York: Cambridge University Press.

Hemming, R., Kell, M. & Mahfouz, S. (2002). *The effectiveness of fiscal policy in stimulating economic activity: a review of the literature*. IMF Working Paper WP/02/208. Washington D.C.: International Monetary Fund.

Honohan, P. (1995). The Public Policy Role of the European Investment Bank within the EU. *Journal of Common Market Studies*, 33(3), 315-330. doi. 10.1111/j.1468-5965.1995.tb00537.x

Horn, G., Gechert, S., Herzog-Stein, A., Rannenberg, A., Rietzler, K. & Tober, S. (2015). *Wirtschaftspolitische Herausforderungen 2015 - Wirtschaftspolitik unter Zwängen*. IMK Report 102. Düsseldorf: Hans Böckler Stiftung - Insitut für Makroökonomie und Kunjunkturforschung.

Independent Annual Growth Survey, (2012). *Failed Austerity in Europe - The Way Out*. iAGS 2013 - First Report. Observatoire Français Des Conjonctures Économiques, Arbejderbevægelsens Erhvervsråd, Institut für Makroökonomie und Konjunturforschung.

International Monetary Fund, (2012). *World Economic Outlook - Coping with high debt and sluggish growth*. Washington D.C.: International Monetary Fund.

International Monetary Fund, (2014). *World Economic Outlook October 2014*. World Economic and Financial Surveys. Washington D.C.: International Monetary Fund.

Jones, E. (2013). The collapse of the Brussels-Frankfurt consensus and the future of the euro. In: V. Schmidt & M. Thatcher, (eds.), *Resilient Liberalism in Europe's Political Economy*. New York: Cambridge University Press, pp.145–169.

Lucarelli, B., (2012). German neomercantilism and the European sovereign debt crisis. *Journal of Post-Keynesian Economics*, 34(2), 205–224.

Marzinotto, B. (2011a). *A European Fund For Economic Revival In Crisis Countries*. Bruegel Policy Contribution Issue 2011/01. Brussels: Bruegel. Accessed, 5 Oct. 2014. [Retrieved from].

Marzinotto, B. (2011b). *The Long Term EU Budget: Size or Flexibility?*. Bruegel Policy Contribution Issue 2012/10. Brussels: Bruegel. Accessed, 5 Oct. 2014. [Retrieved from].

Marzinotto, B. (2012). *The Growth Effects of EU Cohesion Policy: A Meta-Analysis*. Bruegel Working Paper 2012/14. Brussels: Bruegel. Accessed, 5 Oct. 2014. [Retrieved from].

Moody's Investors Service, (2014). Rating Action: Moody's changes outlook on European Investment Bank's Aaa rating to stable from negative; rating affirmed. Accessed, 22 Jan. 2015. [Retrieved from].

Moravcsik, A. (2012). Europe After the Crisis - How to Sustain a Common Currency. *Foreign Affairs*, 91(3), 53-68.

Mussler, W. (2014). Treffen der Eurogruppe - Schäuble bringt Kapitalerhöhung für EU-Bank ins Spiel. *Frankfurter Allgemeine Zeitung*. Accessed, 13 Jan. 2015. [Retrieved from].

Núnez Ferrer, J., & Katarivas, M. (2014). *What are the effects of the EU budget: Driving force or drop in the ocean?*. CEPS Special Report No. 86. Brussels: Centre for European Policy Studies.

Núnez Ferrer, J., Volkery, A., Withana, S., & Medarova-Bergstrom, K. (2012). *The Use of Innovative Financial Instrument for Financing EU Policies and Objectives*. CEPS Special Report No.68. Brussels: Centre for European Policy Studies.

Nyikos, G. (2013). The Impact of Developments Implemented from Public Finances, with Special Regard to EU Cohesion Policy. *Public Finance Quarterly*, 58(2), 163-183.

ÖIR Management Dienste, (2007). *The Leverage Effects of European Cohesion Policy under the Structural Funds*. Vienna: ÖIR Management Dienste GmbH. Accessed, 4 Oct. 2014. [Retrieved from].

Paúl, J. & Uxó, J. (2013). The adjustment of current account imbalances within the European Monetary Union since the beginning of the Great Depression. In: O. Dejuán, E. Paños and J. Uxó, eds., *Post-Keynesian views of the crisis and its remedies*. London: Routledge, p.ch. 7.

Pisani-Ferry, J., Vihriälä, E., & Wolff, G. (2013). *Options For a Euro-Area Fiscal Capacity*. Bruegel Policy Contribution Issue 2013/01. Brussels: Bruegel.

Rabesandratana, T. (2014). E.U. Commission wants to divert Horizon 2020 money into new investment fund. Accessed, 16 May 2015. [Retrieved from].

Robinson, N. (2009). The European Investment Bank: The EU's Neglected Institution. *Journal of Common Market Studies*, 47(3), 651-673. doi. 10.1111/j.1468-5965.2009.01818.x

Robinson, N. & Bain, R., (2012). *The implications of EIB and EBRD co-financing for the EU budget*. Directorate-General For Internal Policies - Study. Brussels: European Parliament.

Rodríguez-Pose, A., & Novak, K. (2013). Learning processes and economic returns in European Cohesion policy. *Investigaciones Regionales*, 25, 7-26.

Sadeh, T., & Verdun, A. (2009). Explaining Europe's Monetary Union: A Survey of the Literature. *International Studies Review*, 11(2), 277-301. doi. 10.1111/j.1468-2486.2009.00849.x

Saka, O., Fuertes, A., & Kalotycho, (2014). *ECB Policy and Eurozone Fragility: Was De Grauwe Right?*. CEPS Working Document No, 397. Brussels: Centre for European Policy Studies.

Scharpf, F. (2011). *Monetary Union, Fiscal Crisis and the Preemption of Democracy*. LEQS Annual Lecture Paper No. 36. London: London School of Economics and Political Science.

Scharpf, F. (2014). *No Exit from the Euro-Rescue Trap?*. MPIfG Discussion Paper 14/4. Cologne: Max Planck Institute for the Study of Societies.

Schilirò, D. (2013). *Changes in the Eurozone governance after the crisis and the issue of growth*. MPRA Paper No. 51458. Accessed, 12 Aug. 2014. [Retrieved from].

Schulmeister, S. (2014). *A General Financial Transactions Tax Motives, Effects and Implementation According to the Proposal of the European Commission*. WIFO Working Papers No. 461. Vienna: Österreichisches Institut für Wirtschaftsforschung.

Seccareccia, M. (2012). The Role of Public Investment as Principal Macroeconomic Tool to Promote Long-Term Growth - Keynes Legacy. *International Journal of Political Economy*, 40(4), 62-82.

Smail, R. (2010). The response of Cohesion Policy to the economic crisis. *EIPASCOPE*, (2010/2), pp.27–34.

Smeets, D., & Zimmermann, M. (2013). Did the EU Summits Succeed in Convincing the Markets during the Recent Crisis? *Journal of Common Market Studies*, 51(6), 1158-1177. doi. 10.1111/jcms.12062

Spence, J., Smith, J., & Dardier, P. (2012). *Overview of financial instruments used in the EU multiannual financial framework period 2007-2013 and the Commission's proposals for 2014-2020*. Directorate-General For Internal Policies - Analytical Study. Brussels: European Parliament.

Traynor, I. (2014). EU parliament gets behind Juncker's €315bn investment plan. *The Guardian*. Accessed, 15 Jan. 2015. [Retrieved from].

Truger, A. (2014). *Austerity, cyclical adjustment and the remaining leeway for expansionary fiscal policies in the Euro area*. IMK Working Paper No. 140. [online] Düsseldorf: Hans Böckler Stiftung - Insitut für Makroökonomie und Kunjunkturforschung. Accessed, 20 Oct. 2014. [Retrieved from].

Tuijnman, A. (2009). The Education Lending Policy of the European Investment Bank. *European Journal of Education*, 44(1), 111-125. doi. 10.1111/j.1465-3435.2008.01374.x

Varga, J., & in 't Veld, J. (2010). *The Potential Impact of EU Cohesion Policy Spending in the 2007-13 Programming Period: A Model-Based Analysis*. Directorate-General Internal Policies of the Union - Economic Papers No. 422. Brussels: European Commission.

Veugelers, R. (2014). The Achilles' heel of Juncker's investment plan. Accessed, 16 May 2015. [Retrieved from].

Weidmann, J. (2012). Rebalancing Europe. Accessed, 25 Jan. 2015. [Retrieved from].

Zachmann, G. (2012). *Smart Choices for Growth*. Bruegel Policy Contribution 2012/21. Brussels, Bruegel. Accessed, 5 Oct. 2014. [Retrieved from].

Zezza, G. (2012). The impact of fiscal austerity in the Eurozone. *Review of Keynesian Economics*, 1(Inaugural Issue), 37-54. doi. 10.4337/roke.2012.01.03

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