

WORKING PAPER

POSTING OF WORKERS AS STABILISING MECHANISM. AN ENLARGED NOTION OF LABOUR MOBILITY AS A PREREQUISITE FOR AN OPTIMAL CURRENCY AREA



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Abstract

Several reasons favour increased ‘temporary’ intra-EU labour mobility through posting of workers rather than a more ‘permanent’ kind of intra-EU labour mobility through migration of EU-workers and self-employed persons, as a prerequisite for an optimum currency area or as a stabilisation tool to support adjustment to asymmetric shocks. Moreover, other criteria to realise an optimum currency area and to stabilise asymmetric shocks, in particular through fiscal transfers and wage flexibility, could be fulfilled by the posting of workers as well. This posting mechanism, which involves workers being temporarily employed in a Member State other than their Member State of origin but still being taxed in their Member State of origin, is therefore a useful stabilisation tool in case the Member State of origin is confronted with an asymmetric shock. The impact of the stabilisation effect of posting workers will be determined by several aspects: the number of posted workers, the wage earned in the Member State of temporary employment and finally the period of posting. This stabilisation effect was calculated for Greece. If some 10% of the current unemployed population living in Greece would be posted for a period of 6 months or longer, yearly approximately € 1 billion labour tax revenues would be collected by Greece, which is equal to roughly 4% of their total labour tax revenues. We recommend on this basis that Greece could encourage the use of posting of workers as potential stabilisation tool.

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Introduction¹

It is acknowledged that “an EMU-level stabilisation tool to support adjustment to asymmetric shocks, facilitating strong economic integration and convergence and avoiding the setting up of long-term transfer flows, could become a component for a genuine EMU” (EC, 2012a, p. 31). According to the European Council (2012), the design of this ‘insurance’ mechanism, which would be set up within a partial/full ‘fiscal union’, could follow a macroeconomic or a microeconomic approach (see also Juncker et al., 2015). De Grauwe (2014) considers this mechanism to be crucial for the survival of the EMU but emphasises at the same time also the limitations of it because of the arising moral hazard risk and the risk of permanent transfer flows. The microeconomic approach refers in particular to the implementation of a European unemployment benefit scheme. In recent years, scholars have become increasingly interested in this idea (see, for instance, Beblavy, Marconi and Maselli, 2015; Dullien, 2014; Claeys et al., 2014) as is the European Commission (2013b).² Also Vandenbroucke (2014) links this ‘insurance’ mechanism to social security systems by arguing for the development of a European Social Union (ESU) (see also Vandenbroucke and Vanhercke, 2014). The strong focus on a single stabilising mechanism, namely the design of a ‘fiscal or even a social union’, might lead to a blindness for other more obvious and perhaps also more realistic options.

Arpaia et al. (2014) make a clear distinction between ‘persistent’ asymmetric shocks and ‘temporary’ shocks, the latter of which can be addressed by national stabilisers and safety nets. In that sense, security schemes at national level could be considered as the most important stabilisation tool during the financial and economic crisis (Pacolet and De Wispelaere, 2015; EC, 2014d). Moreover, the applied national fiscal policy and the introduction of a so-called ‘tax shift’ could act as a potential stabilising mechanism in case of a ‘temporary’ asymmetric shock (Prammer, 2011).

Mundell (1961) considered factor mobility as the adjustment mechanism to solve more ‘persistent’ asymmetric shocks since labour mobility³ should restore ‘full’ employment by decreasing the labour force to the jobs available in regions hit by a negative asymmetric shock. Also Krugman (2012) emphasised more recently the importance of labour mobility in his paper ‘Revenge of the Optimum Currency Area’. Most scholars, however, tend to use a too narrow definition of labour mobility as potential stabilisation tool within a currency area. This might also be one of the reasons why labour mobility has been criticised as potential adjustment mechanism for Member States confronted with an asymmetric shock within the EMU (see, for instance, Eichengreen, 1991 and Puhani, 1999). On the contrary, not only labour migration but also other types of labour mobility should be taken into consideration.

Within the EMU, to be considered as a currency area, the free movement of goods, persons, services and capital is ensured by the Treaty on the functioning of the European Union (TFEU). Intra-EU mobility should therefore be considered as the result of the free movement of workers (Art. 45 of the TFEU), the freedom of establishment (Art. 49 of the TFEU) and the provision of services (Art. 57 of the TFEU). The migration of persons of working age resulting in a ‘permanent’ (i.e. more durable) stay in the new Member State of residence (as worker or as self-employed person) is only one type of intra-EU mobility.⁴ Other types are cross-border commuting and the ‘temporary’ stay

1 The authors would like to thank Prof Dr Yves Jorens, Sarah Van den Broucke and Dr Filip Van Overmeiren for their very useful comments.

2 In 2014, the Commission has launched a call for tender in order to assess the feasibility and the value added of introducing a European unemployment benefit scheme (VT/2014/045).

3 Borjas (2010, p. 317) defines labour mobility as “the mechanism that labour markets use to improve the allocation of workers to firms”. This includes mobility within the national labour market but also mobility across national labour markets.

4 Intra-EU migrants may not necessarily move permanently but only for a temporary period to another EU Member State (i.e. ‘return migration’).

through posting. Posting could be defined as an activity of an employee for his or her employer which is temporarily exercised outside the Member State where the employer is established (this term is not defined in taxation law).⁵ Posting encompasses both the freedom to provide cross-border services and the free movement of workers. The term 'posted worker' applied in the paper includes both posted workers and posted self-employed persons.

This paper will emphasise the added value of posting of workers as stabilisation mechanism within the Eurozone but also within the EU. Several reasons favour increased 'temporary' intra-EU labour mobility through the posting of workers over a more 'permanent' intra-EU labour mobility through the migration of EU-workers and self-employed persons.⁶ Moreover, other criteria in order to realise an optimum currency area and to stabilise asymmetric shocks, in particular through fiscal transfers and wage flexibility, could possibly be fulfilled by the posting of workers.

Optimal currency area theory and the EMU

An important limitation of regions [Member States in the event of the EMU] with a common currency and confronted with an asymmetric shock⁷ is their inability to depreciate exchange rates in order to stimulate demand for export. The theory of the optimum currency area (OCA), introduced by Mundell (1961)⁸ and further complemented by McKinnon (1963) and Kenen (1969), defined some criteria in order to reach an optimal⁹ geographical area for a single currency, whose exchange rates are fixed. Fulfilling these criteria should reduce the need for nominal exchange rate adjustments by lessening the impact of asymmetric shocks (Mongelli, 2008). Most cited OCA criteria are: price and wage flexibility, factor mobility including labour mobility, financial market integration, the degree of economic openness, the diversification in production and consumption, similarities of inflation rates, fiscal integration and finally political integration (Mongelli, 2002; 2008). Jager and Hafner (2013) divide these criteria into two groups, a first group of 'preventive' criteria which should reduce the exposure of Member States to asymmetric shocks and a second group of 'stabilising' criteria which facilitate the adjustment to asymmetric shocks. This paper will focus in particular on this latter group. Possible 'stabilising' criteria within the alternative adjustment process are: labour mobility, price and wage flexibility and fiscal integration (Ibid.; Arestis and Sawyer, 2013; European Council, 2012).

During the development of the EMU but also afterwards it was frequently discussed if this monetary union could fulfil the conditions of an optimum currency area. Despite the absence of such a thing as an OCA test,¹⁰ some scholars concluded that the EMU did not fulfil many OCA criteria (see, for

5 Art. 2 of Directive 96/71/EC defines a posted worker as "A worker who, for a limited period, carries out his work in the territory of a Member State other than the State in which he normally works". Art. 12 (1) of Regulation (EC) No 883/2004 defines a posted worker as "A person who pursues an activity as an employed person in a Member State on behalf of an employer which normally carries out its activities there and who is posted by that employer to another Member State to perform work on that employer's behalf ... provided that the anticipated duration of such work does not exceed twenty-four months and that he is not sent to replace another person." Article 12 (2) of Regulation (EC) No 883/2004 defines a posted self-employed person as "A person who normally pursues an activity as a self-employed person in a Member State who goes to pursue a similar activity in another Member State ... provided that the anticipated duration of such activity does not exceed twenty-four months."

6 Making a distinction between 'temporary' and 'permanent' labour mobility is only one possible method to analyse the different types of labour mobility. Green et al. (2009) report mobility on the basis of duration and the frequency of movement. However, the determination of 'long-term' and 'short-term' mobility is a challenging issue. For instance, in case of posting, the temporary employment is limited to a maximum period of 24 months under social security coordination law and 183 days under taxation law. The literature reported by Green et al. (2009) suggests a period of at least a year in case the term 'long-term' would be used.

7 "An economic shock is considered to be asymmetric if only one part of the currency area is hit by the shock while the other part is spared or if member countries differ widely in terms of the shock's impact on their economies" (Jager and Hafner, 2013, p. 315).

8 For a more detailed review, see for instance, Horvath, 2003.

9 The interpretation of the term 'optimal' is diverse (see, for instance, Horvath, 2003). Mongelli (2008, p. 2) states that "optimality is defined in terms of various OCA properties."

10 It is remarkable that the theory of the optimum currency area was largely ignored during the development process of the EMU. The EC (1990, p. 31) in its report 'One Market, One Money' even states "there is no ready-to-use theory for assessing the costs and benefits of EMU. Despite its early insights, the 'theory of optimum currency areas' provides a too narrow and somewhat outdated framework of analysis."

instance, Eichengreen, 1991). Frankel and Rose (1997) concluded, however, that even after the implementation of the EMU the OCA criteria could be reached ex-post as a result of the endogenous effects (see also De Grauwe and Mongelli, 2005). Nonetheless, Jäger and Hafner (2013, p. 322) concluded more recently that *“the lack of adjustment tools such as labour mobility or a transfer payment system makes it very costly for the EMU to recover from the current crisis.”*

The implementation of a so-called ‘fiscal union’ or ‘fiscal federalism’ (Oates, 1972; 2005)¹¹ as a result of fiscal integration is the most frequently discussed criteria of the OCA-theory. The ‘MacDougall Report’, published in 1977, introduced already the idea of a counter-cyclical fiscal stabiliser at European level in order to tackle regional asymmetric shocks. Some of the main features of the central government, as part of a fiscal federalism, are the stabilisation and income redistribution mechanisms between better and worse performing Member States (Oates, 1999; Abraham, 1996). However, this idea to complement an automatic fiscal stabiliser to the EMU has also potential risks. Firstly, it might result in a so-called ‘transfer union’ through permanent transfers instead of a ‘fiscal’ union. Secondly, there is the risk of moral hazard. Also, the discussion on the development of a stabilisation function within the EMU in terms of financing and key features of the mechanism is still on-going (Iara, 2015; Clemens et al., 2012; Darvas, 2010; Bordo, et al., 2013; Allard, 2013).

The fact that the EMU is still missing a fiscal stabilisation function is perhaps somewhat unexpected since solidarity can be considered as an essential element in the well-functioning of it. As Abraham (1996, p. 100) points out *“when a state faces an adverse economic shock or suffers from structural adjustment problems, it has the right to expect support from other Member States in the federation because it cannot unilaterally devalue its exchange rate”*. Although, as Clemens et al. (2012, p. 10) conclude *“the Eurozone is not doomed without a fiscal union”* (see also Feld and Osterloh, 2013). In that sense, the financial assistance of the European Stability Mechanism (ESM) and the European Financial Stability Facility (EFSF) alongside the intervention of the ECB and the funding of the IMF have been essential in order to preserve the financial stability of the EU. To what extent also intra-EU mobility, and in particular posting of workers, can act as a financial stabiliser, will be discussed below.

The ‘limited’ extent of labour mobility in Europe

If a Member State is hit by a negative shock, workers could migrate to another Member State within the same monetary union to keep the unemployment level in the affected Member State low and to pursue ‘full employment’ (Krugman, 2012). Many scholars consider labour mobility as very low in the EMU, especially compared to the US (Eichengreen, 2014). As a result, the EMU as potential optimum currency area has been criticised since it does not fulfil (sufficiently) the requirement of interregional labour mobility (Puhani, 1999; Eichengreen, 1991). Yet, is a low level of intra-EU labour mobility *per se* avoidable? If the EU-integration process brings forth rising incomes of new EU-Member States and an upward convergence/cohesion between Member States, intra-EU labour mobility could consequently decrease (Pelkmans, 2006; Bonin et al., 2008). Furthermore, the appraisal of the volume of a labour mobility (as too low or high enough) would be more balanced if all types of intra-EU labour mobility are taken into account.

Intra-EU labour mobility has in fact different faces (*Table 1*): ‘permanent’ stay in another EU Member by migration, cross-border commuting and ‘temporary’ stay through posting of workers. The first group involves EU migrants of working age (15 to 64 years old) who moved to an EU Member State other than their EU Member State of birth or citizenship. In 2013, the ‘stock’ of citizens of working age (15 to 64 years) from an EU-28 Member State/EFTA country who resided in another EU-28

¹¹ There is a rich literature on the concept of ‘fiscal federalism’ which will not be discussed within the context of this paper (see, for instance, Oates, 1999).

Member State was around 3.1% of the total population of working age (Cannetta et al., 2014). Approximately 7 million EU citizens worked and lived in an EU Member State other than their own (equal to 3.3% of total employment in the EU) (European Commission, 2014). Figures on the annual inflows are also very relevant. In 2012, approximately 1.8 million EU/EFTA citizens of working age migrated to another EU-28 Member State or EFTA country of which some 700 thousand EU-28/EFTA citizens returned to their Member State of citizenship. In addition, in 2013 roughly 1.3 million EU citizens were employed in an EU Member State other than their EU Member State of residence (= 'cross-border workers'), representing roughly 0.4 to 0.6% of total employment in the EU. Some 65% or 814 thousand cross-border workers were employed in a neighbouring Member State (= 'frontier worker')¹². Finally, in 2013 some 1.34 million 'Portable Documents A1'¹³ were issued to posted workers residing in an EU-28 Member State/EFTA country (Pacolet and De Wispelaere, 2014).¹⁴ When counting in all these different types of labour mobility, approximately 4.5% of EU employment could be linked to intra-EU labour mobility.

Intra-EU mobility has experienced an upward evolution during the last decade.¹⁵ Especially the EU enlargements of 2004 and 2007 have influenced intra-EU labour mobility (OECD, 2012; Jauer et al., 2014), even despite the applied transitional arrangements¹⁶ to restrict inflow of workers from new Member States during several years. As a side effect, these transitional arrangements have caused a higher number of (bogus) self-employed persons (Kahanec, 2012). At the same time, the temporary restrictions on movement of workers from new Member States are probably also a reason for the substantial rise of the number of posted workers. Both phenomena can be conceptualised as the 'front door/back door principle' (Van Overmeiren, 2008).¹⁷ The number of PDs A1/E101 forms issued to posted workers increased from some 1.0 million at the start of the transitional arrangements to 1.34 million in 2013 (Pacolet and De Wispelaere, 2014; Ismeri, 2012). Despite the increase by a third, posting represents still a modest impact on the population of working age. Nonetheless, it has become an important annual flow of intra-EU mobility.

12 This definition of a frontier worker differs from the definition used in Regulation (EC) No. 883/2004.

13 The Portable Document A1 is a formal statement on the applicable social security legislation and proves that the posted worker pays social security contributions in another Member State. The number of PDs A1 issued according to Article 12 of Regulation (EC) No. 883/2004 is, however, not necessarily equal to the number of persons involved (*cf. infra*).

14 In 2013, a total of 1.7 million PDs A1 were issued by the reporting Member States. Approximately 1.3 million PDs A1 were related to postings to one specific Member State. The remainder PDs A1 were applicable to persons active in 2 or more Member States and to common agreements.

15 Still, even despite the increase of intra-EU mobility the stock of TCN immigrants in 2013 is still higher in the EU (EC, 2014b; 2014d; Cannetta et al., 2014).

16 For a transitional period of up to 7 years ('2+3+2' formula) after Member States joined the EU, restrictions may apply on the free movement of workers from these Member States. The policy regarding the applied transitional period highly differs across 'receiving' EU Member States. There are also differences in applicable policy depending on the date new Member States have joined the EU (2004, 2007 or 2013) (OECD, 2012; Minderhoud, 2009).

17 By introducing transitional arrangements one could expect a low level of labour mobility from the 'new' to the 'old' Member States. Nevertheless, on the basis of free movement to provide services and the freedom of establishment posted workers and self-employed persons could enter the 'old' Member States despite the restrictions on the free movement of workers. This could imply a limited number of migrant and cross-border workers entering the labour market of the 'old' Member States during the transitional period but a high number of posted workers and self-employed entering these Member States.

Table 1 Types of intra-EU labour mobility, 2012-2013

Type	Flows/Stocks	Number	%	Year
Total stock EU/EFTA migrants of working age*	Stocks		3.1% of total EU-28 population of working age	2013
Flow of EU/EFTA migrants of working age*	Flows	1.8 million	0.5% of total EU-28/EFTA population of working age	2012
<i>Of which 'return migration' **</i>	Flows	714,000	0.2% of total EU-28/EFTA population of working age	2012
EU migrants working and living in another MS other	Stocks	7 million	3.3% of total EU employment	2013
Cross-border workers in EU-28	Stocks	1.3 million	0.6% of total EU employment	2013
<i>Of which 'frontier workers' ****</i>	Stocks	814,000		2013
Posted workers in EU28/EFTA (number of PDs A1) *****	Flows	1.34 million *****	± 0.2 to 0.6% of total EU/EFTA employment *****	2013

* By citizenship of the migrant.

** We cannot know if someone has ever previously lived in the country of citizenship.

*** Cross-border workers employed in a neighbouring Member State

**** The number of PDs A1 issued is not necessarily equal to the number of posted workers involved.

***** In 2013, a total of 1.7 million PDs A1 were issued by the reporting Member States (including posting of workers, active in 2 or more countries and bilateral agreements).

***** The real impact will be much lower in case figures are corrected by the number of 'unique' posted workers or the number of posted workers in full-time equivalents.

Source Based on LFS; Eurostat data on migration, Cannetta et al., 2014; Pacolet and De Wispelaere, 2014

A large amount of literature exists on the determinants that are likely to affect (labour) mobility (i.e. migration). A distinction could, among others, be made between push and pull factors of mobility or between long-run and short/medium-run determinants (Pelkmans, 2006). The mobility decision will be determined by different socio-economic (e.g. income, unemployment rate, cost of living), demographic (e.g. age, education, skills, household composition) and socio-cultural (e.g. network, language) aspects (Bonin et al., 2008; Borjas, 2010; Kahanec et al., 2010; Zimmerman, 2009, Beyer and Smets, 2015). However, also the cost of moving, not only in terms of a monetary cost but also as psychological cost, should be taken into consideration (Zaiceva and Zimmerman, 2008; Bonin et al., 2008). Since the probability of labour mobility will be determined by both cost and benefit related determinants, Bonin et al. (2008) recommend to enlarge the mobility benefits and to reduce the mobility costs. Also in case of the posting of workers push and pull factors could be defined, which are not necessarily similar to these in case of migration.

Especially the main causes for the quite limited extent of intra-EU mobility (i.e. migration) should be defined in order to assess the limitations of this OCA-criterium. Differences in language and culture are considered as one of the key mobility hurdles (Bonin et al., 2008; Zimmerman, 2009). But also the risk of not finding a job should be considered as an important obstacle (Bonin et al., 2008).¹⁸

Legal framework

A short description will be given of the most important provisions in social security coordination and taxation law affecting this type of labour mobility (see also Spiegel et al., 2014).

¹⁸ Other barriers defined by Zimmerman (2009, p. 11) are: "The increase in home ownership; limited transferability of social security systems; too little recognition of formal qualifications; a lack of innovation in Europe; a fall in available jobs due to low economic jobs; the ageing of the working population, and an absence of transparency of European online employment exchanges".

The social security systems of the countries of the European Union, Liechtenstein, Norway, Iceland and Switzerland are coordinated by Basic Regulation (EC) No 883/2004¹⁹ and Implementing Regulation (EC) No 987/2009²⁰. At EU level there are no coordinating tax rules determining which Member State will tax income during the posting period. However, this may be set out in national laws or bilateral tax agreements. The ‘double taxation conventions’ agreed between EU Member States are mainly inspired on the OECD Model Convention on Income and on Capital (Spiegel et al., 2014). Both types of law should avoid double social security contributions and taxation. Both types of law also cover more countries than only the Eurozone.

‘Posting’ under Regulation (EC) No 883/2004 is defined as any activity of an employee for his or her employer which is only temporarily exercised outside the Member State where the employer is established. This term is, however, not described in the OECD Model Tax Convention on Income and on Capital.

Social security coordination as well as income taxation law exempt the posted worker to pay social security contributions and personal income taxes in the Member State of temporary employment. However, this exemption is temporary and differs between social security coordination and income taxation law. Social security contributions²¹ could be paid in the Member State of origin for a maximum period of 24 months, and personal income taxes for a period of less than 183 days within a period of 12 months that starts or ends in the fiscal year (*Figure 1*).²² Moreover, a number of legal conditions have to be fulfilled in order to be exempt from the payment of labour taxes in the Member State of temporary employment. These conditions and the potential negative impact of it on posting of workers as adjustment mechanism, will be discussed in another section of this paper.

Figure 1 Posting in social security coordination and taxation law, competence to levy taxes

Posting period	Tax	Social security
Less than 183 days	MS of origin	MS of origin
Between 183 days and 24 months	MS of employment	MS of origin
Longer than 24 months	MS of employment	MS of employment

Source Own figure

Typology of posting of workers

In 2013, approximately 1.34 million PDs A1 were issued to posted workers temporary employed in a Member State other than their Member State of origin (of which approximately 670 thousand issued within the EMU) (Pacolet and De Wispelaere, 2014).²³ However, caution should be made for misinterpretation of this number, as the number of PDs A1 does not refer to ‘unique’ persons. A worker could be posted multiple times during the same year, which implies several PDs A1 being issued to the same posted person. However, the period of posting could also be longer than one year. In absolute terms, the three main sending Member States were Poland (262,714 PDs A1 issued), Germany (227,008 PDs A1 issued) and France (123,580 PDs A1 issued) and the three main receiving Member States were Germany (373,666 PDs A1 received), France (182,219 PDs A1 received) and

19 Regulation (EC) No 883/2004 of the European Parliament and of the Council of 29 April 2004 on the coordination of social security systems.

20 Regulation (EC) No 987/2009 of the European Parliament and of the Council of 16 September 2009 laying down the procedure for implementing Regulation (EC) No 883/2004 on the coordination of social security systems.

21 Extendable to 5 years (Art 16 of Regulation (EC) No 883/2004).

22 Art. 12 of Regulation (EC) No 883/2004 of the European Parliament and of the Council of 29 April 2004 on the coordination of social security systems. Art. 15 (2) of the OECD Model Tax Convention on Income and on Capital.

23 There is still uncertainty to what extent the number of PDs A1 issued by Member States is a precise measure of the actual number of postings taking place. For example, in 2012 Belgium received a total of about 373,000 LIMOSA registrations, whereas only 125,000 PDs A1 were delivered for persons sent to Belgium (source: National Social Security Office - NSSO).

Belgium (134,340 PDs A1 received). Roughly 56% of all PDs A1 were issued to posted workers originating from EU-15 Member States and 86% of the PDs A1 were issued to posted workers who were temporarily employed within the EU-15.²⁴

On average an equivalent of 0.6% of the total employed population was posted to another Member State. However, when using the number of ‘unique’ posted workers²⁵ this ratio would reduce to only 0.4% of the employed population. Taking also the posting period into account (the duration of the posting period was on average 119 days in 2012 and 100 days in 2013)²⁶, roughly 0.2% of the employment in full-time equivalents could be related to the posting of workers. In relative terms, Luxembourg and Slovenia were the main sending Member States and Luxembourg, Belgium and Austria were the three main receiving Member States.

In 2013, on average 43.9% of the PDs A1 were issued to posted workers employed in the construction sector (Pacolet and De Wispelaere, 2014). Furthermore, 31.8% of the forms were issued for activities in the service sector and 22.7% for other industrial activities (excluding the construction sector). The distribution of the economic activity varies markedly among the sending EU-15 (especially employed in the service sector) and EU-13 Member States (especially employed in the construction sector). These two types of posting, low-medium skilled workers posted from low labour cost to high labour cost Member States, mainly in labour-intensive sectors, on the one hand, and medium-high skilled workers posted in qualified occupations, on the other hand was also described in previous research (Ismeri, 2012).

The impact of posting on sending and receiving Member States could be related to the evolution of the main drivers of posting. Previous research defined the unemployment rate – from a sending perspective – and labour costs – from a receiving perspective – as the main explanatory variables of the extent of posting (Ismeri, 2012). But also geographical proximity (e.g. 52.3% of the persons with a PD A1 were sent to a neighbouring Member State) and labour shortages are important drivers (Ismeri, 2012; Idea Consult and Ecorys, 2011; Pacolet and De Wispelaere, 2014; EC, 2014d). Nonetheless, the tax advantage that ‘foreign’ services providers may enjoy, could in many cases be considered as an additional important push factor (De Wispelaere and Pacolet, 2015). Similar to migration, language and culture are considered as the main barriers regarding posting, in addition to the administrative burden service providers may face (Idea Consult and Ecorys, 2011). These barriers are probably the main causes for the quite limited extent of workers being posted. Consequently, they are an important limitation to guarantee a sufficient impact of posting as stabilising mechanism.

Beneficial components of ‘temporary’ labour mobility as adjustment mechanism through posting of workers compared to ‘permanent’ labour mobility through migration

The main goal of labour mobility as adjustment mechanism is to keep the unemployment level in the affected Member State low. This could be realised not only through labour migration but also through the posting of workers to another Member State of employment. This section will focus on the advantages and disadvantages of the posting of workers compared to labour migration as adjustment mechanism. Then again, in the end both components will be important given that a broad

24 We use the term ‘EU-15’ to refer to the ‘old’ EU Member States (Belgium, Greece, Luxembourg, Denmark, Spain, Netherlands, Germany, France, Portugal, Ireland, Italy, United Kingdom, Austria, Finland and Sweden); ‘EU-13’ to refer to the ‘new’ Member States (Croatia, Romania, Bulgaria, Poland, Czech Republic, Latvia, Lithuania, Slovenia, Estonia, Slovakia, Hungary, Cyprus and Malta).

25 ‘Unique’ implies that posted workers who received more than one PD A1 certificate during the reference period are only counted once.

26 Some caution is required when drawing conclusions since only 8 Member States reported figures on the average duration of the posting period.

interpretation of the term ‘labour mobility’ could facilitate also a broader range of adjustment mechanisms. Moreover, the distinction between both is not strict, since intra-EU migrants may not necessarily move permanently but only for a temporary period to another EU Member State (i.e. ‘return migration’) (Minderhoud, 2009). In 2012, some 700 thousand EU-28/EFTA citizens returned to their Member State of citizenship (Table 1). This was especially observed for ‘new’ Member States as Romania, Estonia, Lithuania and Latvia (EC, 2014b).

Posting of workers and the negative connotation of this phenomenon, as it would undermine jobs for local employees (‘job displacement’) and the competitiveness of local employers, have become a hot issue in public and political debate (see, for instance, Jorens, 2009; Maslauskaitė, 2014; Idea Consult and Ecorys, 2012; Bernaciak, 2014). Perhaps (too) little attention has been paid to other, more positive aspects of posting. The ability of posting to increase employment, to decrease unemployment, to increase household incomes and labour tax revenues in the Member State of origin are important features to stabilise asymmetric shocks (see Figure 2) but also to create convergence between ‘new’ and ‘old’ Member States (De Wispelaere and Pacolet, 2015).

Maslauskaitė (2014, p. 20) already stressed the importance of posting of workers in order to keep the unemployment level low: *“such short-term migration of labour might help shield cyclical divergences on sectorial or national levels. Companies may thus keep their experienced workers without having to go through firing-and-hiring procedures depending on economic cycle of one Member State whereas workers get to keep their jobs, albeit temporarily based in another Member State”*. This implies a shift of the employed population towards another Member State of temporary employment. However, in fact there should not even be a job available in the Member State of origin. In that case an unemployed person could be recruited for posting and becomes a real stabilising mechanism. The temporary ‘export’ of unemployed persons will as a result lead to a lower public unemployment spending.²⁷ There will also be an ‘artificial’ influence on employment rates in sending Member States in case there is a ‘temporary’ shift of employment to another Member State.

Migration not necessarily guarantees employment in the new Member State of residence. Recent migrants aged 25 to 54 indeed show a higher unemployment rate compared to the nationals (Canetta et al., 2014; Fries-Tersch and Mabilia, 2015).²⁸ Despite the so-called ‘welfare-magnet hypothesis’ (Borjas, 1999), which became a popular issue in public debate, in particular in the context of the EU enlargement, barriers appear to hamper the inclusion of migrants in the new Member State of residence (Giulietti and Kahanec, 2013). Despite the fact that the majority of migrants moves to find a job (IFK GHK and Milieu Ltd., 2014), these barriers to inclusion in the labour market could result in a shift of the elevated unemployment rate from the Member State of origin to the new Member State of residence. In case of posting, services should be requested by (sub)contractors/users of the temporary Member State of employment. This supposes a sufficiently high ‘foreign’ demand (which is not at all guaranteed) if posting of workers has to function as stabiliser. Moreover, also a sufficiently high ‘domestic’ supply is not guaranteed given that posting of workers is mainly employer-driven. This is in contrast to labour migration which is more a worker-driven decision. Therefore, we tend to conclude that in particular private employment agencies will have to hire out a high number of workers since subcontracting and intra-group posting may have its limitations in number of workers being posted.²⁹ In that case, there will be an employment relationship between the temporary

²⁷ For a detail discussion on the cost of unemployment see Gerard et al. (2012).

²⁸ When selecting the migrants of working age (15 to 64 years old) who live no longer than 10 years in their Member State of residence, the unemployment rate of this group will be lower compared to nationals. This might be the result of return migration by migrants who could not find a job.

²⁹ Art. 1(3) of Directive 96/71 of the European Parliament and of the Council of 16 December 1996 concerning the posting of workers in the framework of the provision of services covers three transnational posting situations.

employment agency and the worker during the period of posting and a business contract between the temporary employment agency and the user undertaking (Eurociett, 2009).

Another limitation of migration is formulated in the conclusion of Kenen (1969, p. 11), stating that *“we do not have perfect mobility because perfect interregional [labour] mobility implies perfect occupation mobility and the latter does not prevail”*. One of the consequences is that migrant workers tend to be overqualified for the jobs they take up (OECD, 2012). This might even create a risk of displacement effects on low-skilled jobs (European Commission, 2014d). On the contrary, posting is the result of a specific demand in the Member State of temporary employment which ensures labour mobility and occupation mobility. However, also in case of posting there might be a risk of displacement effects. Yet this risk is mainly concentrated to a limited number of Member States and within these Member States to labour-intensive sectors (De Wispelaere and Pacolet, 2015).

The level of the migration cost, considered as one of the main factors influencing the probability of moving across geographic regions, will differ between migrant workers and posted workers. Transportation, housing and meals might be paid/compensated by the employer of the posted workers, in particular by a ‘per diem’ allowance (van Hoek and Houwerzijl, 2011). This implies in that case a much lower cost of moving compared to those faced by migrant workers.

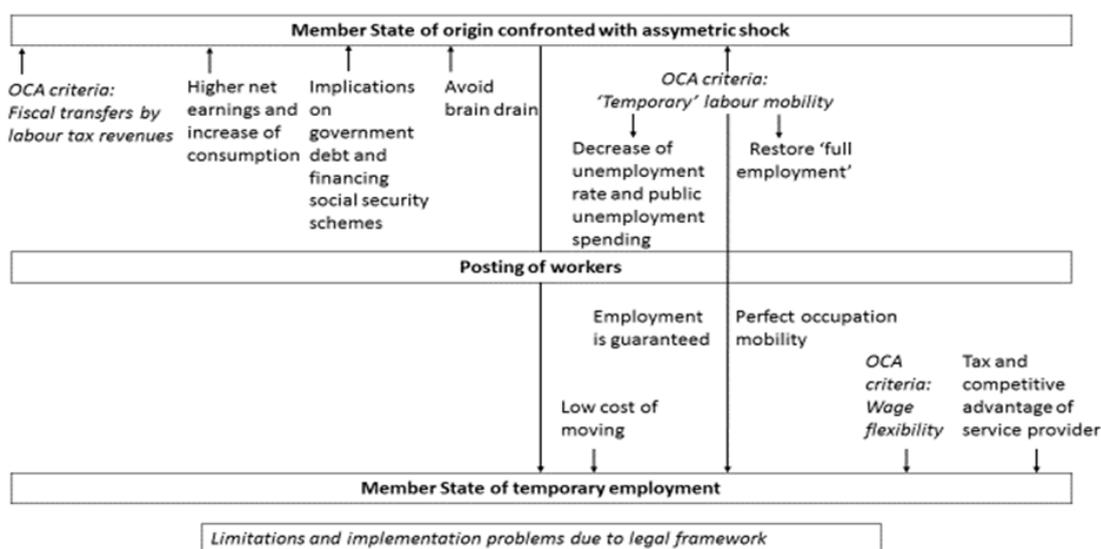
A potential negative consequence of migration is the risk of ‘brain drain’ in the Member State of origin (EC, 2014d). Eichengreen (2014) points out that this can have a permanent negative effect on the productivity and the competitiveness of the Member State of origin. To what extent this is a real threat was recently discussed by Cannetta et al. (2014). Based on the analysis of the mobility patterns of young citizens, they observe a slightly higher movement of highly educated people that, however, varies across Member States and is even the opposite for some Eastern European Member States. Interestingly, and perhaps even more important within the context of the so-called ‘brain drain’ debate, is that young people (15 to 34 years) show a much higher mobility pattern (Ibid., 2014; EC, 2014). Nonetheless, this risk of ‘brain drain’ is only temporary in case of return migration and might even lead to increased skills, financial means and additional support of the Member State of origin (Kahanec, Zaiceva and Zimmerman, 2009; Zaiceva and Zimmerman, 2012). In the event of posting of workers brain drain is not a real threat or is also only temporary. Posting could even result in better skilled workers after the period of posting.

Posting of workers as adjustment mechanism seems to have, however, an important disadvantage compared to labour migration when Member States are confronted with a persistent medium or long run asymmetric shock. Due to the maximum duration of posting determined by social security coordination law (max. 24 months) and taxation law (max. 183 days)³⁰ posting of workers might be considered as a temporary adjustment mechanism.³¹ However, already after two months from the date of expiry of the previous posting period, a worker can be authorised to provide services in a Member State other than the Member State of origin (EC, 2012b). This should guarantee in the long run a sufficiently high permanent flow of posted workers.

³⁰ However, a longer period of posting than 183 days is possible. In that case posted workers will be taxed in their ‘temporary’ Member State of employment.

³¹ However, see Art. 16 of Regulation (EC) No 883/2004 (extendable to even 5 years if there is a common agreement between two or more Member States).

Figure 2 Impact posting of workers on OCA-criteria and other components



Source Own figure

Fulfilling also other OCA-criteria: fiscal transfers and wage flexibility

Migration as adjustment mechanism might result in some important negative effects on the welfare of the Member State of origin (see, for instance, EC, 2014d). Among others, Farhi and Werning (2014) raised that “*the interesting and less obvious question is whether this exodus [of migrants] also helps those that stay behind*”. This is not necessarily the case if workers are posted to another Member State of employment. One could even argue that posting not only fulfils the labour mobility OCA-criteria but also other stabilising criteria.

Permanent (labour) mobility involves that migrants will no longer be taxed in the Member State of origin. Together with their labour supply also their purchasing power is leaving, as stressed by Farhi and Werning (2014). As a result, Baglioni et al. (2014) conclude that this emigration also erodes the tax base and the number of people left to pay for the government debt which might constrain a dynamic national fiscal policy. This interplay between labour mobility and fiscal policy will also be influenced by the posting of workers. As mentioned before, posting is an exception from the general taxation principle as posted workers will be taxed in the Member State of origin for a certain period of time despite their temporary employment in another Member State. This has important consequences on the labour tax revenues of Member States hit by a negative shock. Labour will still be taxed by the Member State of origin which results in important labour tax revenues earned on the basis of the posting of workers. The latter is not the case if persons migrate to another Member State. It also guarantees the financing of the public debt and social protection expenses. Additionally, this involves that the posted worker can still claim social security benefits in case of unemployment, retirement, invalidity, etc. in the Member State of origin. The extent of these labour tax revenues through posting and their ability to act as a sufficient stabilisation tool in terms of ‘fiscal transfers’ will be estimated in the empirical part of this paper. However, issues to be tackled are the challenge of respecting minimum wages and the collection of the proper amount of social contributions and income taxes by the Member State of origin in case workers are posted.

Another OCA-criterium acting as a stabilising mechanism is the realisation of wage flexibility. In case of a negative asymmetric shock a decrease of wages should lead to a lower level of unemployment by an increased demand of labour and a better competitive position of firms due to a lower labour cost

which should stimulate export. Wage flexibility will be realised only to a limited extent in case of posting. The 'Posting of Workers Directive'³² limits to a high extent wage flexibility due to the application of a nucleus of terms and conditions of employment of the 'host' Member State.³³ These provisions have according to Pelkmans (2006, p. 182) *"not given precisely the workers from relatively poor EU countries a possibility to use their competitive advantage to the full (for short periods)."* Still, posted workers might be willing to work for a minimum wage, which is sometimes (much) higher compared to the wage they would earn in the Member State of origin. From a different perspective, these minimum wages are lower compared to the average wage national workers of the receiving Member State are earning. Also, differences in social security and personal income tax rates between the Member State of origin and the Member State of temporary employment might lead to a lower labour cost and a competitive advantage for the 'foreign' service providers and their posted workers (De Wispelaere and Pacolet, 2015).

Finally, the fact that a nucleus of terms and conditions of employment of the Member State of temporary employment has to be respected will most of the time lead to a (much) higher wage for the posted worker compared to the employment in the Member State of origin.³⁴ Those higher wages will probably also lead to an increase of private consumption in the Member State of origin.

Possible implementation problems due to the legal framework

Some important limitations appear when taking the legal framework into regard. As mentioned before, in case of posting only for a maximum period of 24 months social security contributions will be paid in the Member State of origin as well for a maximum period of 183 days for personal income taxes. Moreover, certain legal conditions have to be fulfilled in order to be exempted from the payment of social security contributions and personal income taxes in the Member State of temporary employment. These rules might limit the potential added value of posting as stabilising mechanism. These conditions are defined in social security coordination and taxation law. First the possible limitations due to the coordination of social security schemes will be discussed.

As mentioned before, labour migration could be considered as a rather individual decision. However, in case of posting there should be a direct relationship between the posted worker and an employer that 'normally carries out its activities' in the sending Member State (European Commission, 2012b). A number of principles emerge in order to determine if there is a 'direct relationship'. Also, a series of indicators are to be verified in order to determine whether an employer carries out substantial activities (i.e. 'normally carries out its activities') in the Member State of origin (Ibid., p. 7).^{35, 36} These criteria are, however, not likely to affect posting as an adjustment mechanism.

An important question is whether unemployed persons can be recruited for posting? The answer is positive (European Commission, 2012b) which is of course very important since this implicates that a major impact of posting as adjustment mechanism could be realised. The posted worker should,

32 Directive 96/71/EC of the European Parliament and of the Council of 16 December 1996 concerning the posting of workers in the framework of the provision of services.

33 Member States are not obliged to set or introduce minimum wages if they do not exist in the Member State in question. Therefore, also a debate on the introduction of a 'EU minimum wage' is ongoing. Italy, Austria, Denmark, Finland, Sweden and Cyprus are EU Member States where a minimum does not exist at this moment. For an overview of the monthly minimum wages see Eurostat [earn_mw_cur]

34 Directive 96/71/EC of the European Parliament and of the Council of 16 December 1996 concerning the posting of workers in the framework of the provision of services.

35 Art. 14 (2) of Regulation (EC) No 987/2009 of the European Parliament and of the Council of 16 September 2009 laying down the procedure for implementing Regulation (EC) No 883/2004 on the coordination of social security systems.

36 For instance, the distribution of the turnover achieved by the service provider in the Member State of origin and the Member State of temporary employment of the posted workers, etc.

however, be attached to the social security insurance of the Member State of origin before the start of the employment (for at least one month).^{37, 38}

Finally, the posted worker cannot be sent to replace another posted person.³⁹ This means that in the long run a distribution of the posted workers over several (sub)contractors and Member States of temporary employment is necessary in order to guarantee a sufficient impact of posting as stabilising mechanism.

Alongside the '183-days rule', Art. 15 of the OECD Model Convention on Income and on Capital defines also some other limitations. If the posted worker is temporarily employed less than 183 days within a period of 12 months that starts or ends in the fiscal year concerned in another Member State than the Member State of origin, it has to be verified if the wage a) is paid by, or on behalf of, an employer who is not a resident of the other Member State, and b) the wage is not borne by a permanent establishment which the employer has in the other Member State. As stated by Spiegel et al. (2014, p. 25) *"the question arises whether the sending employer or the receiving employer is to be considered the 'employer' for the purposes of this article."* The OECD (2010) has clarified the interpretation of 'employer' in its official commentary on the OECD Model Convention (see Commentary on article 15 concerning the taxation of income from employment). However, Spiegel et al. (2014, p. 25) point out that *"in this respect, it is worth mentioning that the term 'employer' has been subject to a lot of scholarly debate, diverging case law and dissenting opinions from finance authorities"* (i.e. legal uncertainty).

The potential stabilising effect of posting of workers for Greece

The empirical evidence on the importance of the stabilising effect of labour mobility in the EMU (i.e. labour migration) is quite mixed. Some scholars tend to conclude that labour mobility is an insufficient adjustment mechanism (Puhani, 1999; Elsner and Zimmerman, 2013). Recent studies (Jauer et al., 2014; Arpaia et al., 2014) suggest, however, that labour mobility would absorb roughly 25% (upper bounds) of the asymmetric shock after one year (see also Beyer and Smets, 2015).^{40, 41}

Posting of workers can have a stabilising effect. In this regard, an interesting question is how many workers would be unemployed if they were not posted. It is even thinkable that this is very limited today given that posting is probably not yet considered as a stabilising mechanism. Therefore, it is even more useful to calculate the potential (maximum?) stabilising effect of posting. The stabilising effect could be expressed in terms of number of posted workers in response to the increase of unemployment due to the asymmetric shock. The temporary 'export of workers' will also result in a decline of costs (in terms of public unemployment spending) and an increase of revenues (in terms of labour tax revenues, profit of the service providers, private consumption due to an increase of wages, etc.). However, a negative pressure on the receiving Member States and their social protection schemes might occur, as a possible result of job displacement or lower tax revenues following a negative pressure on wages.

This paper will only estimate the labour taxes levied to the income of posted workers by the Member States of origin. The extent of the stabilisation effect of posting in terms of labour tax revenues will

37 Art. 14 (1) of Regulation (EC) No 987/2009 of the European Parliament and of the Council of 16 September 2009 laying down the procedure for implementing Regulation (EC) No 883/2004 on the coordination of social security systems.

38 "A period of at least one month can be considered as meeting this requirement, with shorter periods requiring a case by case evaluation taking account of all the factors involved" (European Commission, 2012b, p. 10; Administrative Commission Decision A2).

39 Art. 12 of Regulation (EC) No 883/2004 of the European Parliament and of the Council of 29 April 2004 on the coordination of social security systems.

40 Based on the methodology used by Blanchard and Katz (1992).

41 Jauer et al. (2014, p. 19) consider these estimates as upper bounds since "not all migration movements will be of unemployed people, and not all of those who move will take up employment elsewhere".

be determined by different aspects: the number of posted workers, the wage earned in the Member State of temporary employment and finally the period of posting (and of course the social security and personal income tax rates of the Member State of origin). Based on these aspects different scenarios could be determined and calculated:

- *Number of posted workers: 1%, 5% or 10% of the unemployed persons are posted;*
- *Member State of temporary employment: current breakdown, towards high-wage Member States;*
- *Wage: 67% of the average wages or minimum wages;*
- *Posting period: from 3 towards 6 or even 24 months.*

The definition we apply to calculate the annual labour tax revenues from the posted worker's income received by the sending Member State = ***average gross monthly income Member State of temporary employment * social security contributions and personal income tax rates of the Member State of origin * number of PDs A1 issued * duration of the posting period.***⁴²

The average gross monthly income of the posted worker is not known in the available administrative data or survey data.⁴³ We have used, therefore, the earnings statistics of Eurostat in order to estimate the average monthly gross income (single person without children, 67% of the average wage).⁴⁴ On these amounts the tax wedge (by type) (for a single person without children, 67% of the average wage) of the sending Member States is applied. In order to correct cross-border wages for the progressivity of the taxes, also the tax wedge levied on a lower (i.e. 50%) or a higher (i.e. 100%, 125% or 167%) percentage of the average wage by the sending Member should be taken into consideration.⁴⁵ The average monthly labour tax revenues (by tax type) of the sending Member State have been multiplied by the numbers of Portable Documents A1 issued by the sending Member States. This will give us an idea of the monthly labour tax revenues received by the different sending Member States. This should also be multiplied by the average posting period in order to calculate the annual labour tax revenues.

Based on our calculations, labour taxes levied to the income of the posted workers are equal to approximately 0.7% of the total monthly labour tax revenues of the sending Member States (De Wispelaere and Pacolet, 2015). The real annual impact will, however, be lower since the average posting period is not equal to 12 months. This current marginal impact of posting on total labour tax revenues limits the ability to act as a sufficient stabilisation tool. However, as mentioned before, it is probably even more useful to calculate the potential (i.e. maximum?) stabilising effect of posting.

Different scenarios will be applied to Greece given that posting of workers could be considered as a potential adjustment mechanism for the current dire economic and financial situation in this EMU Member State. In April 2014, the EC (2014a) published a fourth review of an assessment of the progress made by Greece with respect to its Second Economic Adjustment Programme. No attention was paid in this report to the impact of labour mobility as potential adjustment mechanism. Also the most recent third bailout programme did not include stabilising measures through labour mobility.⁴⁶

42 For a more detailed description of the methodology see De Wispelaere and Pacolet, 2015.

43 A nucleus of terms and conditions of employment of the Member State of temporary employment has to be respected, defined by Directive 96/71/EC of the European Parliament and of the Council of 16 December 1996 concerning the posting of workers in the framework of the provision of services. However, the labour conditions of the Member State of origin remain applicable if these are more favourable to workers.

44 No breakdown by sector of activity could be made which is of course an important methodological limitation.

45 Some caution is required when applying tax wedges in order to determine the labour tax revenues from cross-border incomes since most Member States levy progressive tax rates on earnings through the application of income-based tax brackets. Since average wages are not similar across Member States, average cross-border wages might be taxed differently compared to the average national wages (i.e. 67% of the average wage in the Member State of origin is not necessarily similar to this of the Member State of employment).

46 http://europa.eu/rapid/press-release_MEMO-15-5513_en.htm

Greece shows a current unemployment rate of 26%, equal to approximately 1.3 million unemployed persons (EC, 2015a). Despite the decrease by 1.3 p.p. compared to a year earlier Greece still has the highest unemployment rate in the EU-28. The youth unemployment rate is even more problematic as 51% of the persons aged 15-24 is unemployed. The forecasts for 2015 and 2016 assume a decline of the unemployment rate to 25.6% in 2015 and 23.2% in 2016 as a result of growth and the employment programmes (EC, 2015b). Those figures prove the necessity of a stabilisation tool, among others by the export of these unemployed persons through the posting rules. Consequently, Greece shows an annual emigration rate (as a percentage of the total population) of approximately 1% between 2011 and 2013 (Fries-Tersch and Mabilia, 2015).

Greece received some € 65.3 billion tax revenues in 2012 equal to 33.7% of GDP (EC, 2014c). Some € 24.3 billion or 37% of the tax revenues could be related to employed labour (personal income taxes and social security contributions) of which € 9.3 billion paid by employers and € 15.1 paid by employees (Ibid.). € 18.1 billion social contributions were received of which € 9.3 million paid by employers and € 8.8 million paid by employees. These figures are a point of reference for the assessment of the stabilising capacity of posting in terms of 'fiscal' transfers.

In 2013, Greece has issued only 1,688 PDs A1 related to posting of workers of which 1,068 PDs A1 issued for the posting of workers to Germany (Pacolet and De Wispelaere, 2014). Despite this low number of forms issued, this implies an increase by 163% compared to 2010 which is the highest increase of all EU-28/EFTA countries. Nonetheless, this is only equal to 0.05% of the employed population in Greece. The limited number of PDs A1 issued implies also a negligible amount of labour taxes levied to the wages of the outgoing posted workers and a marginal impact on total labour tax revenues.

However, if a significant number of (unemployed) persons living in Greece would be posted to another Member State during a period of at least 6 months, much more taxes would be levied by Greece. If Greece could accomplish that 10% of the unemployed persons, equal to some 127,300 persons or 3.5% of the employed population, are temporarily posted to another Member State for 6 months, yearly some € 776 million taxes could be collected, which is equal to 3.2% of their total labour tax revenues (*Table 2*). This amount will even be higher if these workers are posted for the complete year (€ 1.4 billion or 5.9% of total labour tax revenues). Those figures prove that posting can act as a potential stabilisation tool.⁴⁷

⁴⁷ Slovenia is probably a good example since a high number of their employed population is posted. However, more detailed information on the context is required to draw any definite conclusions.

Table 2 Estimated labour tax revenues from posting of workers (in million €) and impact on total labour tax revenues, different scenarios, Greece, 2013

	Employers' social contributions <i>(in million €)</i> <i>(1 month)</i>	Employees' social contributions <i>(in million €)</i> <i>(1 month)</i>	Personal Income <i>(in million €)</i> <i>(1 month)</i>	Total <i>(in million €)</i> <i>(1 month)</i>	Period of 6 months <i>(in million €)</i>	% of total labour tax revenues	Period of 12 months <i>(excl. Personal Income taxes)*</i> <i>(in million €)</i>	% of total labour tax revenues
Current situation	1	1	0	2	9	0.0%	17	0.1%
1% of unemployed persons (12,730)	8	5	1	13	78	0.3%	144	0.6%
Towards high wage MSs	9	5	1	15	88	0.4%	165	0.7%
5% of unemployed persons	38	23	4	65	388	1.6%	722	3.0%
10% of unemployed persons	75	45	9	129	776	3.2%	1,445	5.9%

* Total labour tax revenues: figures of 2012

** After 183-days personal income taxes will be paid in the Member State of temporary employment.

Source Own calculations based on Pacolet and De Wispelaere, 2014 and Eurostat

Conclusion

Several reasons favour 'temporary' intra-EU labour mobility through posting of workers rather than a more 'permanent' intra-EU labour mobility through migration of EU-workers and self-employed persons, as a prerequisite for an optimum currency area or as a stabilisation tool to support adjustment to asymmetric shocks. Moreover, other criteria to realise an optimum currency area and to stabilise asymmetric shocks, in particular through fiscal transfers and wage flexibility, could be fulfilled by the posting of workers as well. The ability of posting - which involves workers being temporarily employed in a Member State other than their Member State of origin but still being taxed in their Member State of origin - to increase employment, to decrease unemployment, to increase household incomes and labour tax revenues in the Member State of origin are important features. This posting mechanism is therefore a useful stabilisation tool if the Member State of origin is confronted with an asymmetric shock. It might even be considered as an 'economic panacea'⁴⁸. However, there are also some important limitations. Firstly, a sufficiently high 'foreign' demand for services and a 'domestic' supply of workers is required. Secondly, due to the maximum posting period determined by social security coordination law (max. 24 months) and taxation law (max. 183 days) posting of workers might be considered as a temporary adjustment mechanism. Finally, the challenge of respecting minimum wages and the collection of the proper amount of social contributions and income taxes by the Member State of origin in case workers are posted, are outstanding issues to be tackled. The impact of the stabilisation effect of posting will be determined by several aspects: the number of posted workers, the wage earned in the Member State of temporary employment and finally the period of posting. This stabilisation effect was calculated for Greece. If some 10% of the current unemployed population living in Greece would be posted for a period of 6 months or longer, yearly approximately € 1 billion labour tax revenues would be collected by Greece, which is equal to roughly 4% of their total labour tax revenues. We recommend on this basis that Greece could encourage the use of posting of workers as potential stabilisation tool. However, more research is required to assess in detail the social and economic impact of posting as stabilising mechanism on sending and receiving Member States.

⁴⁸ Referring to the book of Prof. Yves Jorens (2009), *Handboek Europese detachering en vrij verkeer van diensten. Economisch wondermiddel of sociaal kerkhof?*

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