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Free movement of persons with residency fees

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I. Introduction

From the past to the present, European economic and societal developments have largely been shaped and transformed by migrants. Today, cross-border mobility of persons and rising mobility in general are again highly relevant topics for citizens as well as political and economic decision makers. Free movement of persons is a central element of the European Union treaties and some affiliated countries to which the framework applies.

Free movement of persons, i.e. individuals are allowed to migrate freely and without bureaucratic hindrance to the country where they want to live and work, exhibits a highly beneficial *freedom effect*. Nevertheless, free movement of persons is seen with rising scepticism. This holds particularly for economies experiencing highly asymmetric migration, i.e. high net immigration as a difference between immigration and emigration relative to the total population. Due to the resulting population growth and the concomitant problems natives and decision makers increasingly worry about the cost-benefit calculus of immigration. The vote for Brexit in the United Kingdom, the acceptance of a popular initiative “to stop mass immigration” in Switzerland, and some of the political reactions to the refugee influx in numerous European countries are all related to immigration worries.

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In the present article we focus primarily on free movement of workers within the European Union and associated countries. We highlight differences between free trade and the free movement of workers and discuss external costs of population growth due to immigration. We suggest that receiving countries and regions which suffer from external costs due to asymmetric immigration should be empowered to levy residency fees from new immigrants to internalize such costs at least partly. We portray the advantages of such fees and discuss relevant aspects of levying them.

II. Humans are not goods

The effects of free movement of workers are often argued to be equivalent to free trade in goods and services. This is incorrect. Free trade can provide enormous benefits to society as a whole and increases economic growth with constant population size[1]. Benefits from free trade even occur if a country opens unilaterally to imports only. Additional benefits of trade come from exploiting comparative advantages and economies of scale, specialization, increasing the variety of goods, a rise in the exchange of ideas, etc. Although some European countries such as Germany, the Netherlands or Switzerland have seen trade surpluses for numerous years, trade is inherently symmetric not only by its nature (exports and imports are compensated by capital flows) but also due to market balancing mechanisms. Adjustments in exchange rates and price levels tend to push trade in goods and services to symmetry in the longer run. Taking an alternative perspective, even holders of large current account surpluses have high import shares such that asymmetries play a minor role. While there may be winners and losers from free trade within an economy[2], the total gains usually exceed the losses by far such that the losers could be compensated.

The situation is different for free movement of persons. While numerous factors such as common language, similar traditions, and existing networks drive migration[3], there is ample evidence that workers systematically migrate from economies with relatively poor living standards to places with higher living standards[4]. Living standards heavily depend on wages such that migration tends to flow from relatively poorer to richer economies. While this makes

[1] For a famous article on the causal effects of trade on growth see Frankel, J. A. & Romer, D. (1999), 'Does Trade Cause Growth?', American Economic Review 89(3), 379-399.
[2] See the influential work by Autor, D. H.; Dorn, D. & Hanson, G. H. (2013), 'The China Syndrome: Local Labor Market Effects of Import Competition in the United States', American Economic Review 103(6), 2121-2168.
[3] See, for example, Beine, M.; Docquier, F. & Özden, Ça. (2011), 'Diasporas', Journal of Development Economics 95(1), 30-41.
[4] For international evidence see Grogger, J. & Hanson, G. H. (2011), 'Income maximization and the selection and sorting of international migrants', Journal of Development Economics 95(1), 42-57.

migration highly asymmetric when compared with trade, explicit price mechanisms only contribute in a limited way to establishing symmetry

Similar to trade, immigration has positive effects on total welfare of the receiving economy as a whole. In contrast to trade, however, population size changes, too. Thus, the effects of immigration on welfare per capita for the native population are ambiguous. Indeed, if the skill distribution of the immigration population is similar to that of the native workforce, often no clear positive or negative effects on wages or unemployment can be found[5]. Immigration propels a linear rise in the total number of workers and a corresponding increase in total output, thus leaving output per capita largely unaffected.

High-skilled immigration may increase the per capita income of the rest of the population as it may have positive external effects on productivity[6] and may cause a fiscal surplus because tax income from high-skilled immigrants tends to be higher than the cost of the services they consume. However, it is likely that such general income increases attract additional migration which will over time contribute to compensating welfare differentials between countries. More importantly, receiving economies often have a comparatively high-skilled native population made up of past migrants and locals such that average new immigrants may at best correspond to the average skill level of the receiving economy, thus again leading to a rise in total output but not output per capita.

III. Effects of free movement of workers

There is a long standing and vivid debate in the literature if and to what extent immigration can depress earnings of natives in receiving economies[7]. The general finding is that immigration has little if any depressing effects on wages. This is consistent with the view that immigration corresponds to a linear expansion of the receiving economy. However, the strong focus of the literature on earnings has shifted attention away from other potential *external costs of immigration*: With higher immigration to particularly attractive economies, population growth increases, too. Fast population growth increases the scarcity of factors such as land, infrastructure and the environment. The increasing scarcity of such fixed factors can lead to

[5] See for example Dustmann, C.; Fabbri, F. & Preston, I. (2005), 'The Impact of Immigration on the British Labour Market', Economic Journal 115(507), F324-F341.
[6] Evidence for this effect is provided by Grossmann, V. & Stadelmann, D. (2013), 'Wage Effects of High-Skilled Migration: International Evidence', World Bank Economic Review 27(2), 297-319.
[7] The recent comprehensive book by Borjas, G. J. (2014), Immigration Economics, Harvard University Press suggests costs of migration for natives regarding earnings.

congestion effects and thus to real costs to society, i.e. negative welfare effects of immigration induced population growth[8].

Some of the congestion costs are reflected by market prices such that there are not only losers of population growth but also winners: In the case of land or housing, higher population growth due to immigration leads to higher land prices and higher rents such that holders of real estate profit from an increase in population size. Other factors are not directly traded on markets and, thus, not associated with explicit market prices such that their more extensive use results in external costs. An example for such external costs are actual congestion of roads and infrastructure or an increase in local environmental damage through pollution as higher population growth is associated with increasing production and energy consumption.

Due to congestion effects, living standards converge between immigration and emigration economies. In equilibrium the difference of the living standards is equal to the costs of migration. Costs of immigration are, however, ever declining. Indeed, many European economies are characterised by migration equilibria. London, Munich or the Swiss Canton of Zug are particularly attractive places to live in. But not everybody automatically moves there because high rents and land prices as well as increasing congestion effects tend to compensate for the advantages.

The convergence of living standards explains, why at the European level large benefits and costs of migration occur: People can move freely according to their productive potential and preferences, thus effecting large gains for themselves. The external costs of rising population, however, are distributed across the hitherto inhabitants of the receiving economies. Congestion effects reduce the welfare of the native population. While there are some winners in the land market – those who own more real estate than they need for their own housing purposes – there are only losers if population growth leads to external costs which are not internalized. From an economic point of view such external costs can be *internalized* by charging the originators an explicit price. The resulting changes in the extent of immigration and the revenue obtained could be used to compensate the losers such that an efficient allocation is achieved.

The current interpretation of the principle of free movement within the European Union and associated countries does not allow for any explicit use of price mechanisms to charge origi-

[8] While the role of land scarcity for migration was dominating in the literature on urban development, it has been almost totally neglected in the academic literature on international migration. We formulated an intuitive analysis of the equilibrium effects in Eichenberger, R & Stadelmann, D. (2010), 'Die Zugisierung der Schweiz', Finanz und Wirtschaft, 17.11.2010, p. 1. For later formal approach see Grossmann, V.; Schäfer, A. & Steger, T. M. (2015), 'On the Interaction Between Migration, Capital Formation, and the Price for Housing Services', Verein für Socialpolitik / German Economic Association, Annual Conference 2015 (Muenster): Economic Development - Theory and Policy.

nators of external costs nor does it allow for any explicit compensation specifically targeted at native losers. Once compensation is offered, it also has to benefit new immigrants as it is forbidden to discriminate between the native individuals and those newly arriving. However, if immigrants are compensated for the external costs they create, an internalization of these costs does not occur. More importantly, migration to economies which suffer from external costs is not reduced but increased.

The external costs of population growth and the impossibility of explicit pricing of immigration as well as compensation for natives may have contributed to the widespread use of alternative implicit instruments for protecting natives from competition by immigrants as well as to a rise of anti-immigrant sentiment which is not restricted to refugees. Indeed, it can be argued that the Brexit vote is associated to a feeling in the native population that sovereignty regarding immigration ought to be gained back. Similarly, various referendum results in Switzerland suggest that potential external costs of immigration influence voting outcomes. Finally, but not only related to migration of European citizens, a rise in right wing parties across Europe is linked to worries on immigration in general and immigration of refugees in particular, such that even redistribution preferences of locals may change because of migration[9].

A highly relevant but systematically neglected element of immigration induced population growth are *negative political incentives*. Due to external costs in receiving economies, the incentives of the native population and politicians to uphold and increase the competitiveness their economy are shrinking. Good policies that have the potential to raise incomes also attract additional immigrants and thus impose additional external costs. Moreover, as explicit compensation mechanisms exclusively for the native population are not possible according to the European Union's definition of the free movement of persons, politicians in numerous local, regional and national economies tend to resort more and more to costly and ineffective implicit ways of discrimination. In particular, they tend to use minimum wages and employment protection laws in the labour market and regulation in the rental market as instruments. In contrast to efficient explicit prices, such inefficient implicit pricing policies are allowed according to the European Union as they do not discriminate explicitly between natives and new immigrants. Rather such rules "only" discriminate between insiders and outsiders, i.e. those that have already a good job and decent housing and those that do not. Thereby, they discriminate potential migrants and the native young generation. The consequence of such rules and regulation is that economic opportunities for the younger generation are systematically shrinking leading to further calls for protective measures.

[9] For an interesting case for changes in preferences see Dahlberg, M.; Edmark, K. & Lundqvist, H. (2012), 'Ethnic Diversity and Preferences for Redistribution', Journal of Political Economy 120(1), 41-76.

IV. Free movement with residency fees

The free movement of workers brings enormous benefits to European society as a whole and to migrants in particular. Thus, the large and positive freedom effect of the free movement of workers needs to be preserved. Not only is it a building stone of a good society but it is efficiency enhancing at the European level. At the same time, it is necessary that local, regional or national external costs of immigration are accounted for and that native losers of high population growth are compensated to ensure that the negative political incentive effects are mitigated and the idea of free movement prevails.

As is commonly known external costs are best internalized by applying the price mechanism such that those who cause the external costs are required to pay for them. We therefore propose that receiving economies of migrants should evaluate the extent of the external costs. Once the extent of these costs are becoming clearer, receiving countries should charge time-dependent residency fees which internalize at least a part of the external cost but should otherwise become fully open, i.e. they should also stop using implicit discrimination of immigrants. Residency fees should be ideally levied on all immigrants, i.e. not only workers, and they should depend on the time that persons are within the receiving economy. They should not represent one-time entry fees[10] which have the character of fixed costs and, thus, are not compatible with rising short, medium and long term mobility between economies. Instead, residency fees should be levied ideally on a daily basis similar to city taxes for tourists. There are ten major strengths of residency fees in the European context.

1. The large and positive freedom effect of the free movement principle remains fully intact. People can still move wherever they want to in Europe and do not face any bureaucratic hindrance.

2. Residency fees at least partly internalize the external costs of migration induced population growth.

3. Residency fees exhibit a positive selection effect on migration. Migrants who evoke higher aggregate gains (i.e. the combined gains of the migrants and their employers) than external costs in the receiving countries will be unaffected because it pays for either the migrant and/or his employer to pay the fee

4. Migration flows would become more symmetric and the disadvantages of asymmetric migration would be reduced.

[10] A one-time entry fee has been proposed as a “radical solution” to the challenge of migration by the 1992 Nobel Prize laureate in Economic Sciences Gary Becker in Becker, G. S. (2011), The Challange of Immigration - a Radical Solution, The Institute of Economic Affairs, London

5. Daily residency fees may easily be levied on all types of immigration, e.g., also on temporary residents and cross-border commuters. In contrast, other mechanism to control immigration, e.g. immigration quota, cannot be applied to these types of immigration at reasonable costs.

6. Residency fees are transparent and do not impose large transaction costs. They do not evoke additional government spending but help to raise revenues.

7. The revenue from residency fees can be used to partly compensate the losers of population growth. They can also be used to reduce distorting taxes and increase the efficiency of the tax system.

8. Residency fees treat all immigrants equally. They are, thus, fairer than quantitative constraints which usually heavily discriminate between different groups of immigrants, employers and regions of the receiving economy.

9. External costs of immigration are not equally distributed within nations and some local jurisdictions or regions may be particularly affected. Residency fees can be levied at the level where external costs occur.

10. Residency fees are compatible with the basic idea of the principle of free movement of persons. Migrants can move wherever they want to, without the consent of the bureaucracy. Fees do not discriminated between nationalities as all immigrants contribute to external costs and fees can be even levied at the local level if external costs occur there. Residency fees represent simply a price for the external costs induced by population growth.

V. Aspects to consider when levying residency fees

Which aspects are important when designing residency fees? Clearly, that concrete design depends on the political aims. From an economic perspective, central elements are that residency fees should internalize external costs, they should not reduce work incentives, they should not impose administrative costs and the revenues should be used to partly offset losers from immigration. Thus, the following elements have to be considered when envisaging concrete residency fees.

Pay for entry or stay? In a Europe with low migration costs, migrants often stay only a limited time in the receiving economies. Thus, an entry fee is not the ideal solution. Instead, receiving economies should levy small fees continuously for the external costs, ideally daily residency fees collected regularly together with other taxes.

Direct or indirect? There are two alternatives of levying residency fees: (i) New immigrants pay a fee in addition to the normal taxes or (ii) new immigrants pay the same taxes but receive lower benefits from the receiving economy. The first alternative is more transparent and treats all immigrants the same. The second alternative allows to selectively target at specific groups of immigrants, e.g., those receiving social benefits. Interestingly, in the negotiations prior to the Brexit vote, the European Union granted the United Kingdom the right to *indirectly* levy migration fees in the event that it remains in the European Union, i.e. the UK was allowed to grant its earned income tax credits only to hitherto residents.

All immigrants or only workers? The economic reason for residency fees lies in the external costs due to migration induced population growth. For these external costs it is not relevant if immigrants are workers, self-employed or pensioners. Thus, residency fees would have to be levied on all types of new immigrants and most importantly, they have to be levied independently of their nationality.

Progressive or independent of income? The income of immigrants is not associated with congestion costs. Thus, there is no reason why residency fees should be income dependent. Some politicians may argue that progressive residency fees would be consistent with an ability-to-pay principle. However, levying progressive residency fees implies that marginal taxes increase. Increasing marginal taxes reduces work incentives and strengthens tax avoidance and tax evasion efforts.

Employers or immigrants? The main winners of immigration are the migrants themselves. Whether a residency fee levied on immigrants is actually carried by the immigrants or shifted to their employers depends on market forces as is well known in the economic literature. Thus, the burden of residency fees will partly be carried by immigrants and employers, depending on the relative elasticities of supply and demand. If labour demand is highly inelastic, then residency fees levied on immigrants will mostly be carried by employers because wages may increase. If, however, labour demand is highly elastic because capital can flows freely into the economy together with immigrants, the burden of residency fees will rather be carried by the immigrants themselves. Past studies have not shown systematic negative effects of immigration on native earnings which is suggestive that labour demand is comparatively elastic and immigrants carry the burden of the residency fee. Put differently: There has not been a systematic downward pressure on wages due to immigration according to much of the literature. It may be speculated, thus, that there will also be no upward pressure on wages when immigration is reduced. In any case, the aim of the residency fees is to internalize external costs. As a consequence, it is not relevant whether workers or employers formally pay the residency fee and also the actual tax incidence is only a second order question. However, it has to be considered that all migrants contribute to external costs, i.e. also those that do not have standard working contracts. As a consequence, family members of immigrants also have to pay residency fees because they contribute to population growth. To reduce administrative and transaction costs such a residency fee should rather payed by immigrants instead of employers.

All these elements suggest that residency fees should be levied in a simple and transparent way as a daily fee on all new immigrants to compensate receiving economies for the external costs and to effectively steer migration. On the other hand, it is of course important that immigrants integrate as quickly as possible in their new country of residence and can become fully and equally entitled citizens in due time. Thus, the residency fees should clearly be time limited, e.g. to three to five years. It is also important to note that congestion effects will decrease over time once additional infrastructure is provided, which is another reason why residency fees should be limited to a few years.

VI. Conclusions

This article proposes the concept of daily residency fees for the first time as a potential new measure to ensure that borders within Europe remain fully open, that immigration worries are reduced, that losers of population growth can be compensated and, most importantly, that external costs are internalized and thus negative political incentives mitigated.

Instead of imposing ever increasing bureaucratic and regulatory ways to curb immigration pressure even leading to outright disassociation within Europe as for instance in the case of Brexit, residency fees represent a flexible mechanism which can be seen as consistent with the idea of free movement within the European Union and associated countries. Residency fees also change the perspective of national borders as external costs may occur at the country level but also at a regional or even a local level.

We understand that our idea of residency fees will be seen as controversial. However, it is important to look at them from a strictly comparative perspective. The real alternatives to residency fees are far more controversial and do not address the issue of external costs associated with immigration induced population growth. Furthermore, we highlight that residency fees are efficiency enhancing in the sense that they put a price tag on external costs. At the same time, they set incentives for decision makers and will contribute to achieving the large and positive freedom effect of the free movement of people also in the future.