

Integrating refugees: A long-term, worthwhile investment

By Marcel Fratzscher and Simon Junker

The debate about the massive influx of refugees into Germany often focuses solely on the short-term costs. But while these expenditures are bound to be substantial in the coming years, the discussion neglects the long-term economic potential of a successful integration of refugees—often, young people—which can transform the initial expenditure into a worthwhile investment. Even if many of the refugees' labor market prospects may be relatively poor for the first few years due to a lack of qualifications, and those who do find employment may be less productive than the average German worker, the long-term gains are likely to exceed the costs. This study uses simple simulations to outline the economic potential by comparing the costs and benefits of an integration in the long run. In addition to a baseline scenario, this article investigates both an optimistic and a pessimistic scenario. (It should be emphasized, however, that these are simulations and not forecasts—clearly, more detailed studies are needed to measure these effects more precisely.) The central question boils down to when, not whether, the integration of refugees gains sufficient momentum to outweigh the costs—because even if the labor market integration turns out to be sluggish, the refugees will still have a positive impact on the German economy after five to ten years. Most importantly, even in terms of per capita income of non-refugees, the benefits will exceed the costs in the long-term, thus highlighting the benefits to the entire economy.

The calculations carried out for the purpose of this study are based on the number of migrants currently seeking asylum in Germany. But due to the recent spike in refugee numbers, the official estimate—which the Federal Government currently sets at 800,000 for 2015—is likely significantly lower than the actual figure. According to media reports, the ministries are expecting this figure to stand at 1.5 million refugees in total by the end of the year. And given the information currently available, this number seems plausible, especially if the number of refugees arriving between October and December remains as high as the number reported in September: That is, in the period between January and September of this year, 303,443 people applied for asylum, and 577,307 people in total have already entered Germany and are intending to submit applications. In September, the number of asylum applications stood at 43,071, and the number of individuals recorded at the Federal Office for Migration and Refugees and in the system for the initial allocation of asylum seekers (*System zur Erstverteilung der Asylbegehrenden*, or EASY) amounted to 163,772.¹

This report assumes a refugee migration of 1.5 million in 2015 and 2016, respectively. Moreover, it is assumed that the number will remain high in 2017, with 750,000 people, and not until 2018 will the influx start to ease up somewhat. From 2018 until 2020, 500,000 people are assumed to come to Germany every year; following this, no further refugee migration is assumed.

The processing of asylum applications is expected to take several months to complete, despite politicians' best efforts to shorten the process. In addition, many refugees will enroll in language and integration courses from the get-go. For an annual calculation like the one carried out here, it therefore makes sense to assume a late entry into the labor market. It is assumed that ref-

¹ See press release from the Federal Ministry of the Interior (BMI), October 7, 2015: *Sehr hoher Asyl-Zugang im September 2015*.

ugees will not take up employment in the year they arrive in Germany, nor in the following year.

The proportion of asylum applications that are approved—that is, the “acceptance rate”—influences the further development of costs and positive effects associated with the migration of refugees. A low ratio can mean that despite rejection, many refugees initially remain in Germany without being able to participate in the labor market. A high ratio, on the one hand, increases the chances of a successful integration by making more workers available to the labor market; on the other hand, it also carries the risk that many of the refugees will be unable to find employment.

The acceptance rate has risen steadily this year—probably because the makeup of the applicant group has shifted strongly toward including individuals with higher chances of receiving a positive decision. Most recently, this ratio stood at 39.1 percent. Since it is likely to keep increasing, it can be assumed that the average ratio will not only remain at this level over the next few years, but also will likely be significantly higher (Table).

Some of the refugees whose asylum applications are rejected will leave Germany. Others, however, will initially remain and be “tolerated.” It is assumed that this group initially accounts for half of all rejected asylum seekers. In the long run, however, more and more are likely to leave Germany. It is assumed that after five years, only one quarter of all refugees without residence permits will still be living in Germany; after the following five years, only one eighth will be.

Effects of refugee migration on the labor market

Various factors will affect the proportion of refugees who find employment. At first, the ages and genders of the accepted asylum seekers will play a critical role. According to currently available data, the proportion of asylum seekers who are of working age—that is, individuals between the ages of 15 and 74—stands at 72.7 percent. Young people account for an exceptionally high number of this share: More than half of the working-age applicants were under the age of 34. It should be noted that only figures about all asylum seekers are available; it is therefore assumed here that this age structure is the same among the accepted asylum seekers. Above all, however, the age structure is likely to have recently shifted once again toward young people. On the one hand, this means that the proportion of working-age refugees could be higher; on the other hand, it means that proportion of children among the current influx of refugees is likely to be high, else these refugees will be having children over the next few years. Because the ratio

Table

Assumptions

In percent

	baseline	pessimistic scenario	optimistic scenario
Acceptance rate	45	40	50
Share of working age population	73	70	75
Participation rate	80	75	85
Unemployment rate			
in years 2-5	60	65	50
in years 6-10	45	50	38
in years 11+	30	35	25
Labor productivity ¹			
in years 2-5	67	50	67
in years 6-10	67	59	67
in years 11+	67	67	67
Costs ²			
during application stage (years 0 and 1)	40	66	33
not accepted, not working			
in years 2-5	30	40	20
in years 6-10	30	40	20
in years 11+	30	40	20
Multiplicators			
during application stage (years 0 and 1)	0.5	0.4	0.5
accepted, working	0.5	0.4	0.5
accepted, not working	0.5	0.4	0.5
rejected	0.5	0.4	0.5

¹ Labor productivity, percent of average productivity.

² In per-capita terms, percentages.

Source: DIW Berlin.

of working individuals to dependent individuals would be lower, the latter case would increase overall costs. For the scenarios examined in this report, a lower proportion (70 percent) as well as a higher proportion (75 percent) of working-age refugees will be considered.

The proportion of working-age refugees who intend to participate in the labor market is also important. It is conceivable, for example, that one of the family members refrains from seeking employment in order to care for children. It is also likely that some of the recognized refugees will take up studies. For the baseline scenario, a labor market participation rate of 80 percent is assumed; this ratio is slightly above the average for all workers in Germany in order to reflect the fact that the proportion of young and male refugees, in particular, is very high—and exactly this group shows a high inclination to work. Deviations of five percentage points each in both directions are taken into account.

The deciding factor regarding the employment effects is the unemployment rate among accepted refugees. Although little data is available here, there is much evidence that unemployment is initially very high among recognized refugees, probably because many refugees do not immediately have the required qualifications, starting with language skills. The longer the refugees remain in Germany, however, it can be assumed that these obstacles will be gradually overcome, and thus the unemployment rate will slowly decrease over time.

In the baseline scenario, it is therefore assumed that in the first year only four out of ten job seekers will find employment—and even in the optimistic scenario, only every other job seeker will. Though the unemployment rate is expected to decrease as the refugees' qualifications increase, it will still be significant even ten years from now. This is suggested by data on individuals living in Germany who came from other countries: For example, the proportion of employed social security-obligated people originally from Syria stands at only 30 percent.² However, this ratio does not take into account mini-jobbers, civil servants, or self-employed workers. Marginal employment, i.e. mini-jobs, however, is expected to be an important form of work for the current influx of refugees.

In addition, the skill level of many refugees could be comparatively low even in the future; it can therefore be assumed that they will be employed primarily in low-skilled jobs. According to the Socio-Economic Panel (SOEP) surveys on average salaries,³ the productivity of individuals in minor employment (people engaged in a job for which only an orientation is required) is one-third below average. This value is likewise assumed for the average productivity of refugees. It is conceivable that the productivity is actually lower at the beginning, and only gradually approaches the average level of low-skilled workers; this corresponds to the “pessimistic scenario.”

Costs to the government

In the current debate, the positive effects of refugee migration are not being discussed to the same extent as

are the associated expenditures, which comprise the initial direct costs for the care, accommodation, and integration of the newly arriving refugees. An annual total of roughly 12,000 euros per refugee seems plausible in this context; this corresponds to approximately one third of the average per capita income. Furthermore, there are the costs of providing social benefits to refugees who have a residence permit, but either are not available to the labor market or cannot find employment. Both cases are based on an average amount that encompasses Hartz IV payments and housing benefits, and stands at 20 percent of the average per capita income; this currently corresponds to about 7,200 euros per year. This cost structure is taken into account in a favorable alternative scenario, because in the baseline scenario, significantly higher costs are already assumed. In the scenario in which chances and risks are assumed to be less favorable, costs are actually assumed to be twice as high.

For asylum seekers whose application has been rejected but who are nevertheless “tolerated” in Germany, a flat rate equal to fifteen percent of the average per capita income is assumed (this currently amounts to roughly 5,400 euros); this size is of secondary importance to the results not only because this group of people is small and will gradually leave Germany, but also primarily because the results are qualitatively robust to changes in this factor.

Boosts in supply and demand

As established above, the current debate focuses too much on the governmental costs of supporting the refugees, thus ignoring the positive economic effects that will come about as a result of two mechanisms: First, refugees who find work stimulate the economy on the supply side by contributing to corporate production.

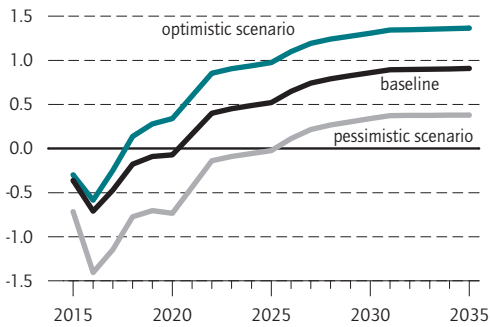
Second, the refugee-related expenditures are accompanied by positive economic demand impulses, because higher demand helps businesses overall. Even the monetary transfers, such as those that accrue to the refugees whose applications are approved but who do not pursue employment, lead to increased consumer demand. This consumer demand is partially served by higher imports, but it also boosts the domestic production—which amounts to a multiplier of less than 1. In addition, public investment in the creation of housing for refugees and the governmental social benefits that arise, for example, for the care of refugees, increase the economic performance to the same extent. Since some of these measures increase household income, which in turn increases demand, these expenditures lead to a disproportionately high increase in aggregate demand; its multiplier is therefore likely to be higher than, or at least close to 1. To assess the effects that arise in the macroe-

² Brenke, K. (2016): *Asylsuchende*. In: Federal Statistical Office; German Institute for Economic Research; Social Science Research Center Berlin (ed.): Data Report 2016 (forthcoming).

³ The German Socio-Economic Panel (SOEP) is the longest and widest-ranging multidisciplinary longitudinal study in Germany. Every year since 1984, several thousand people are surveyed by the fieldwork organization *TNS Infratest*. Currently, the survey encompasses roughly 30,000 respondents in approximately 15,000 households. Among other things, The SOEP data provide information about income, employment, education, health, and life satisfaction. Since the same people are interviewed every year, not only can long-term social trends be particularly well analyzed, but also the group-specific development of life trajectories.

Figure 1

Benefits from successful integration net of costs¹
In percent of GDP



¹ Production increase due to additional demand and refugees' labor supply net of cost for care, accommodation, and integration of the newly arriving refugees as well social transfers for non-employed refugees.

Source: Own calculations.

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After several years positive effects dominate the costs.

economic cycle, a model is required that maps out these relationships and their mutual effect.⁴

In short, a perspective that attempts to measure the economic value of the refugees solely based on their direct taxes and obtained government benefits is false and misleading. Rather, a broader perspective is required that takes into account not only the direct tax revenue and government transfer payments, but above all incorporates the refugees' contribution to the economic performance.

Results

Using the assumptions made here, the potential expansionary impetuses can be compared to the costs.⁵ In all three scenarios under consideration, it is clear that the costs initially predominate (Figure 1)—yet the positive effects predominate in the long run. When the investments from the first year end up paying dividends is de-

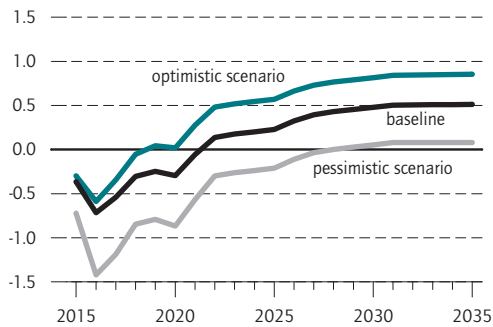
⁴ For the study at hand, a conservative multiplier of 0.5 is chosen; in the pessimistic scenario, the multiplier is set even lower. The choice of a low multiplier means that this study's calculations primarily factor in the direct effects. Indirect effects may be small, but generally positive. These are thus partly excluded.

⁵ Preliminary calculations based on alternative assumptions; in addition to a significantly lower immigration assumed for 2015 and 2016, these differed in particular from the more positive assessment of employment opportunities presented here. This report shows that even under less favorable labor market assumptions, the integration of refugees leads to positive effects in the long term.

Figure 2

Change in per-capita income of people living in Germany already¹

Change in percent vis-à-vis a scenario without refugees



¹ The initial net effect is negative, since costs are hardly offset by additional demand; the value of e.g. -0.7% in 2016 implies that per-capita income is 0.7% lower compared to a counterfactual without refugees. The value of 0.5% in later years shows, however, that eventually, as more and more refugees successfully participate in the labor market, per-capita income will be 0.5% higher for people who already live in Germany, e.g. because they participate in the value added by refugees.

Source: Own calculations.

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Even in the pessimistic scenario, per-capita income eventually increases.

pendent on a variety of assumptions, but even in an unfavorable configuration, such as the pessimistic scenario, the break-even point appears rapidly, only a few years later than it does in the baseline scenario.

Yet it is not only the overall economic performance that increases. Although in the absence of further research the additionally generated income can only be approximately broken down into the share accrued by the refugees and the share that benefits the people already living in Germany, an increase in the per capita income for the latter group also emerges after a few years, assuming that the costs—as well as the additional demand impulses—are to be fully borne by this group, whereas the refugees receive the value added achieved through additional labor corresponding to the share of employee compensation in the economic performance (Figure 2). This takes into account that the long-term expenditures for accommodation, care, and integration and for the social benefits are essentially transfers to the refugees from the people already living in Germany.

Because over time, as the refugees' labor market opportunities increase along with their qualifications—and in the pessimistic scenario, their productivity as well (starting from a very low baseline)—the people already

living in Germany profit indirectly from the increasing demand impulses, as well directly from the value added of the refugees, because profits from entrepreneurial activities related to the employment of refugees partially go to them.

The calculations in this study are based on a simple methodological framework, and in many respects there exists an obvious need for further research of the individual impact channels in more detail and to pinpoint and validate the plausibility of the assumptions made here. Nevertheless, the results show that the costs associated with the integration of refugees should be seen as an investment in the future. Even in the pessimistic scenario, the per capita income of those already living in Germany will increase in the long term (after a little over than ten years); in the most favorable scenario, the positive effect can actually come about more rapidly, even after just four or five years.

Conclusion

The influx of refugees into Europe is presenting the member states with major challenges—and as one of the refugees' main target destinations, Germany is particularly affected. Because current debate focuses mainly on the short-term costs arising from housing, care, and

societal and labor market integration, it is easy to lose sight of the fact that these costs are actually an investment in the future. This present study shows that over the long term, the net contribution of refugee migration to the overall economic performance will be positive.

Moreover, this effect withstands the following assumptions: Even in a very unfavorable case—assuming a once again significantly lower productivity among refugees and costs that are twice as high as those in the baseline scenario—integration is still an investment that will pay off in the long run. Finally, the positive effects apply not only to economic performance; individuals already living in Germany will benefit in the long term through a higher per capita income. In the light of the humanitarian obligations to take in and integrate refugees, debates on alternative uses of the allocated resources continue to be theoretical in nature. That is why it is even more important to actually show the potential of these expenditures. If it is possible to integrate even just some of the refugees into the labor market, the investment already pays off. Nonetheless, the large number of refugees also presents certain risks: It is difficult to predict to what extent the labor market will absorb the low-skilled workers, and in order to give an exact estimate of the potential due to the migration of refugees, further research is needed.

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