

Update 2023

Honorable state? Focus on migration On the fiscal balance sheet of immigration

Arguments
about the market
economy and politics

No. 173 | January 2024

Bernd Raffelhüschen
Stefan Seuffert
Florian Wimmesberger



Honorable state? Focus on migration

On the fiscal balance of immigration

Bernd Raffelhüschen

Stefan Seuffert

Florian Wimmesberger

Arguments about the market economy and politics No. 173

Table of contents

Executive summary	03
1 Introduction	04
2 Migration in generational accounting 2.1	05
Methodological principles 2.2	05
Consideration of migration in generational accounting	06
3 Fiscal sustainability and migration 3.1 Fiscal	08
balance in the status quo 3.2 Migration	08
management scenarios	09
4 Controlling employment migration in an international comparison	12
5 Conclusion	14
literature	15

© 2024

Market Economy Foundation (ed.)
Charlottenstrasse 60
10117 Berlin
Telephone: +49 (0)30 206057-0
info@stiftung-marktwirtschaft.de
www.stiftung-marktwirtschaft.de

ISSN: 1612 – 7072

Cover photo: © Sergej Khackimullin – Fotolia.com

This study was carried out at the Intergenerational Contracts Research Center at the Albert Ludwig University of Freiburg. The authors would like to thank Ann Zimmermann, Guido Raddatz and Tobias Kohlstruck for valuable advice and assistance. The authors are responsible for any remaining errors.

Executive summary

Even if the effects of demographic change on social insurance have only been slightly noticeable so far, the end of the grace period is becoming apparent. The shortage of skilled workers on the labor market is noticeably worsening and the political discussion about recruitment measures is increasing of migrants is increasing. This raises the question of the extent to which labor migration can actually ease the burden on public budgets in the future. Against this background, this publication analyzes the fiscal effects of migration based on the updated generation balance for 2023.

To determine the fiscal balance for future migrants, the current average per capita payments of foreigners living in the country are used and an integration period of six years is assumed. In particular, the assumed six-year integration period in this scenario leads to lower net payments from future migrants than those from the local population and thus to a significant increase in the sustainability gap from 447.8 to 497.1 percent of GDP. In a hypothetical scenario without any future migration flows, the sustainability gap would be 149.7 percentage points lower at 347.4 percent of GDP. The fiscal balance of future immigration is therefore negative and, given the assumed 293,000 immigrants per year, is almost one and a half times the current annual economic output. However, the remaining high sustainability gap in the hypothetical case without migration shows that the actual problems are less due to migration than to an overly generous (welfare) state that permanently lives beyond its means.

One option for reducing the financial burden of migration is through migration policy measures that aim to improve the qualification structure of future migrants. Under optimistic assumptions, these could be selected so that half of them have vocational training or a university degree, which would reduce the sustainability gap by 64 percentage points.

Another way to reduce the financial burden of migration is through migration policy measures that promote additional labor migration. Compared to the annual net migration of 293,000 people in the reference scenario, an additional immigration of 109,000 people is assumed in this scenario. These additional migrants have a higher

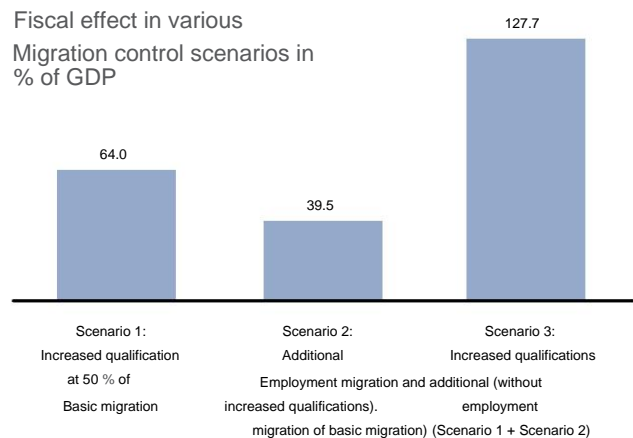
here qualification in the form of vocational training or a university degree, which would reduce the sustainability gap by 39.5 percentage points.

Under the assumptions of the present analysis, the combination of increasing the qualification structure of migrants by 50 percent and these recruitment measures would not lead to a positive fiscal balance of migration overall. Although there would be a positive fiscal effect of 127.7 percent of GDP, overall the fiscal balance of migration would remain negative at -22.0 percent of GDP.

The analysis of the migration scenarios considered shows that an increase in immigration is by no means sufficient to close the sustainability gap. Sustainability gaps remain between 369.4 percent of GDP and 457.6 percent of GDP. Although migration policy is of great importance for fiscal sustainability in Germany, it is not suitable for addressing the consequences of the demographic

Fiscal effect in various

Migration control scenarios in % of GDP



Source: Own calculations based on Raffelhüschen et al. (2023a) and Raffelhüschen et al. (2023b).

to compensate for change. The main reason for this is that the German state as a whole is not sustainably positioned and instead promises its citizens more services than they finance over their life cycle. This means that even a successful migration policy cannot replace an adjustment of state benefits - especially age-specific social spending. The welfare state in its current form is not affordable in the long term, both for the population living in Germany and for immigrants.

1 Introduction

So far, the burden on public budgets caused by demographic change has primarily been shown in the form of projections, but not yet in the state's current income and expenditure. On the contrary, tax and contribution revenues have recently been high and, particularly in the last ten years, have allowed social insurance benefits to be expanded without any significant increases in contribution rates. The burdens of retirement for baby boomers still lay in the future. The future deficits that would one day arise from the (additional) benefit promises of social insurance could still supposedly be ignored.

To date, the effects of demographic change on social insurance have not been noticeable. But the end of the calm before the storm is looming. Most of the baby boomers are still working and healthy. Their parents are still more dependent on care insurance benefits than they are themselves. But the first signs of the demographic wave that will hit us in the coming years with the arrival of the baby boom are already emerging on the labor market in the form of an increasing shortage of skilled workers

age groups and will further exacerbate the shortage of skilled workers. The revival of the political discussion about targeted measures to recruit migrant workers shows that at least this fact can no longer be ignored politically. But to what extent is employment migration suitable for relieving the burden on future households? How high is the fiscal potential of migration actually? Could a successful migration policy perhaps banish the specter of demographic aging from the fiscal policy debate without having to significantly restrict the level of government performance?

To answer these questions, this publication analyzes the 2023 update of the generational balance sheet with regard to the fiscal effects of migration. Chapter 2 first explains the methodological basis of generational accounting in general and the investigation of migration effects in particular. Chapter 3 presents the migration-specific results of the 2023 update and shows in three scenarios to what extent additional employment migration and an improvement in the qualification structure of migrants are suitable for consolidating fiscal sustainability.

2 Migration in generational accounting

2.1 Methodological basics

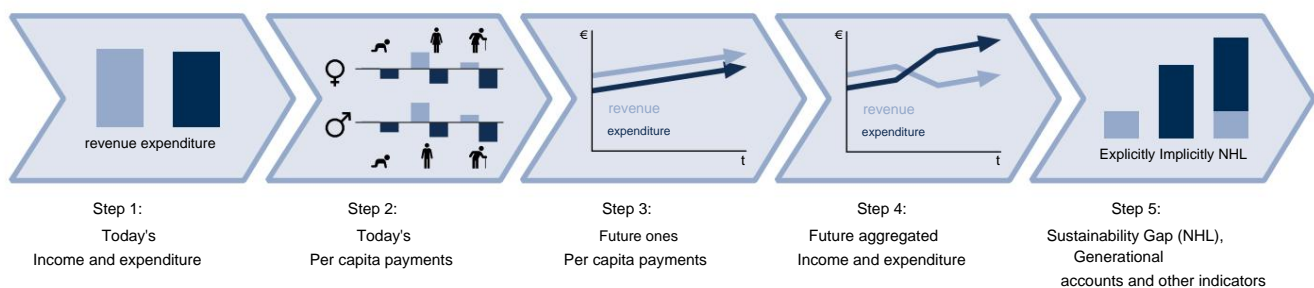
Generational accounting was developed by Auerbach et al. (1991, 1992, 1994) developed to analyze the long-term sustainability of public finances as well as the effects of fiscal and social policy.¹ Essentially, this is a dynamic fiscal accounting and therefore an instrument for projecting the long-term Development of public finances and their intergenerational distributional effects. The basis for the projection of public finances in generational accounting is assumptions about demographic developments as well as the economic and fiscal policy framework conditions in the future. On this basis, the future disparity between income and expenditure can be

determine the development of public budgets. If future expenditure exceeds future income, this is referred to as implicit national debt. This reflects the extent to which explicit national debt will increase in the future if current policies are continued in the long term.

In addition to taking the implicit debt burden into account, generational accounting can be used to determine the amount with which both current and future generations will contribute to the state's future income and expenditure. Therefore, well-founded statements can be made not only about the financial sustainability of a particular fiscal and social policy, but also about their intergenerational distributional effects. The methodological process of generational balancing is outlined in Figure 1.

Illustration 1:
Generational balancing in five steps

Source: Own illustration.



The first step in generational accounting is the current public finances, i.e. the government's income and expenditure according to the national accounts.² These aggregated payments are calculated using micro data sets as age- and gender-specific per capita payments on the various those living today (second step).

In the third step, these per capita payments, taking into account reforms that have already been decided,

continued with productivity growth. Using a long-term population projection to take demographic development into account, the fourth step is to calculate the state's future aggregate income and expenditure by linking the projected per capita payments to population development. Finally, all future income and expenses are discounted to calculate the present value in order to determine the sustainability gap and other indicators.

¹ A detailed description of the methodology as well as the criticism of generational accounting can be found in Raffelhüschen (1999), Bonin (2001) and in Wimmerberger and Seuffert (2022).

² The assumptions and data sources correspond to those of the 2023 update of the generation balance (Raffelhüschen et al., 2023a).

The central indicators of generational accounting are:

- **Implicit debt:** In contrast to explicit debt, which primarily reflects the extent of past budget deficits, implicit debt corresponds to the sum of all future (primary) deficits or surpluses. If a surplus is achieved in a future year, the implicit debt is reduced, while a deficit leads to an increase. The implicit debt thus reflects the extent to which future deficits and surpluses are (not) balanced.
- **Sustainability gap:** In the sense of a debt ratio, the sustainability gap corresponds to the actual national debt in relation to today's gross domestic product (GDP). The actual national debt is made up of the national debt that is already visible or explicit and the national debt that is still invisible or implicit. A positive sustainability gap indicates that the current fiscal policy is unsustainable in the long term and therefore tax and

Tax increases or savings are unavoidable in the future.

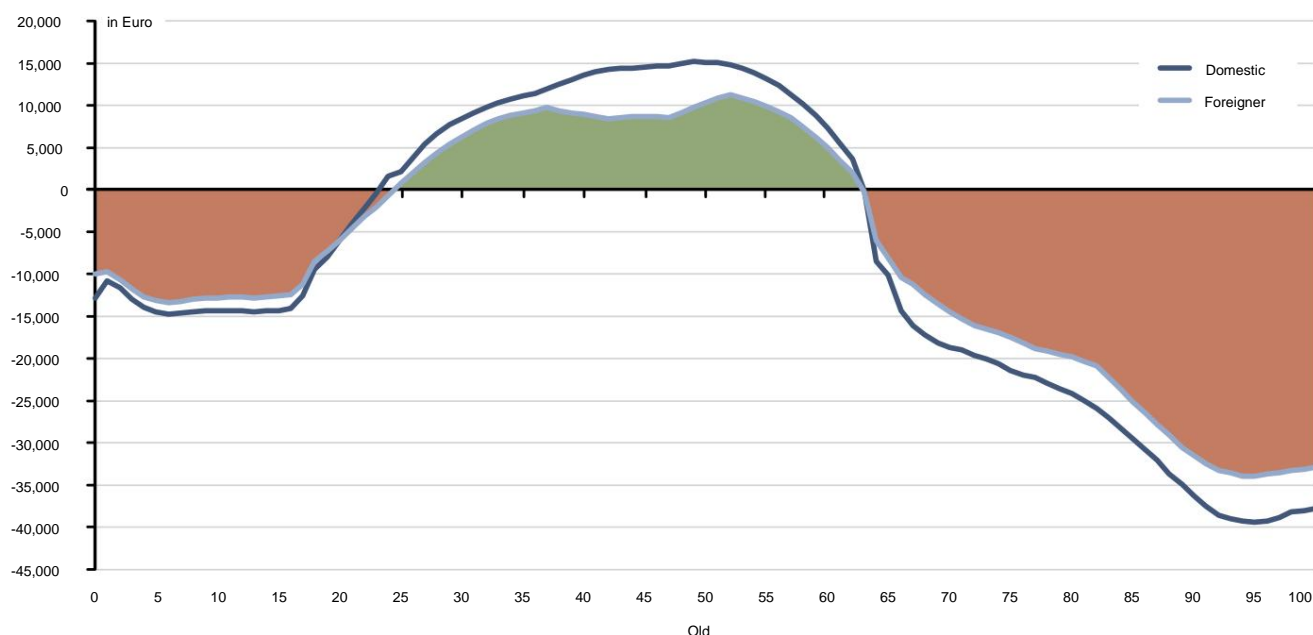
- **Sustainable tax increase:** The sustainable tax increase indicator corresponds to the extent by which revenue from taxes and social security contributions would have to be permanently increased in order to close the sustainability gap in the long term.³

2.2 Consideration of migration in the Generational accounting

The generational accounting method has been used for more than two decades to analyze the fiscal impact of migration (Auerbach and Oreopoulos, 1999; Bonin et al., 2000). Here, the income and expenditure of the base year are divided between the domestic and foreign population using specific per capita payments (step 2 in Figure 1). In the

Figure 2:
Net payments per capita

Source: Own calculations based on data from the 2018 income and consumption sample and the socio-economic panel v37.



³ This is a purely static consideration, i.e. changes in people's behavior as a result of an increase in taxes are neglected. This also applies to the indicator of sustainable spending reductions.

Per capita payments used in the present analysis are shown in Figure 2. During the employment phase, the foreign population makes lower net payments on average than the domestic population - i.e. those who already have German citizenship in the base year. In return, however, she also receives lower net benefits during the retirement phase. To calculate future net government payments for both groups, both per capita payments and population are projected separately for residents and nonresidents (steps 3 and 4). This makes it possible to also show the key figures for generational accounting separately (step 5 in Figure 1).

In the analysis, the effects of migration in the update of the 2023 generation balance are integrated by integrating the results of Raffelhüschen et al. (2023b) with the base year 2020 in the results of the generation balance 2023 with the base year 2021. Raffelhüschen et al. (2023b) consider seven parameters that influence the fiscal impact of migration. In addition to the number of migrants, two integration parameters and four qualification parameters are taken into account: Integration is modeled based on the duration of integration⁴ and the increase in the emigration rate⁵ during the integration phase. To examine the effects of increasing the qualification level of migrants, the proportion of migrants with higher qualifications is varied. This means that the level of training as well as the consumption and service-receiving behavior corresponds to that of nationals or migrants already living here. In this study, the results of the medium variants of the migration scenarios based on these parameters are combined with the results of the 2023 update based on newer fiscal data to provide an updated estimate of the fiscal effects of migration.

Population-adjusted sustainability gap: Comparing scenarios with different population growth reveals a notable feature regarding implicit debt. Under the condition that the age structure remains unchanged, the existing implicit debt increases *ceteris paribus* (approximately) linearly with the increasing future population size.

Hagist et al. (2011, p. 24) refer to this increase in deficits as the “demographic effect” of migration. This is not a structural change in fiscal sustainability, but rather a pure size effect. Since the sustainability gap and implicit debt refer to economic performance in the base year and do not take future economic performance into account, they are distorted by this size effect when considering scenarios with different population sizes. The indicator of the sustainable increase in expenditure does not have this limitation because it is adjusted for population figures but is sensitive to changes in the population structure. This approach takes into account not only the fiscal burden, but also the number and distribution of the shoulders on which this burden will fall in the future. Despite these advantages, this indicator is not used in this analysis because it is less intuitive to interpret. Instead, population-adjusted sustainability gaps are used in the results section, which are based on a transfer of the relative change in the sustainable tax increase to the sustainability gaps.

Fiscal balance of migration: In this study, the term “fiscal balance of future migration” is understood to mean the change in the sustainability gap compared to a scenario without any migration. In this sense, the balance sheet refers to a corresponding increase (negative balance) or reduction (positive balance) of the fiscal sustainability gap as a percentage of GDP.

⁴ In this context, the integration period refers to the period between immigration and the achievement of the final per capita payments of the migrants. grants and migrants.

⁵ The population projection underlying the study assumes emigration probabilities for both the domestic and foreign population. These can be increased for migrants within the integration phase as part of the model used. For methodological reasons, overall migration remains unaffected by the emigration rate of other foreigners being increased accordingly.

3 Fiscal sustainability and migration

3.1 Fiscal balance in the status quo

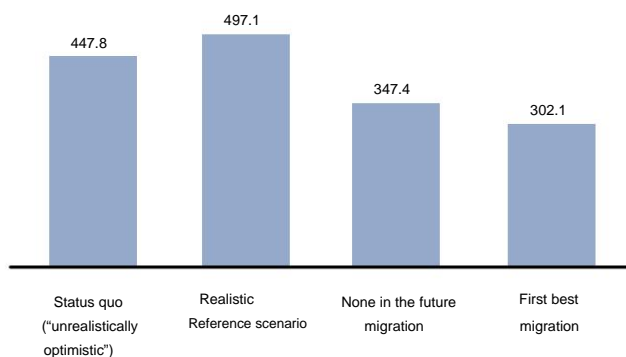
Lack of fiscal sustainability

In order to determine the fiscal balance resulting from future migration, it is first necessary to determine the current sustainability gap in a reference scenario. In generation accounting, the current average per capita payments of foreigners living in Germany are usually used for future migrants (see Figure 2) and at the same time it is assumed that future immigrants will adapt to the level of foreigners already living in Germany immediately he follows. This "unrealistic-optimistic" assumption is common practice in studies based on generational accounting, particularly to ensure international comparability. It causes the sustainability gap of 447.8 percent of GDP known from this year's update of the generation balance (Raffelhüschen et al., 2023a) (see Figure 3). In the context of a fiscal analysis of migration, however, the assumption of immediate integration is not suitable. The following is

Figure 3:
Fiscal balance of migration in the status quo –
sustainability gaps in comparison

in % of GDP

Source: Own calculations based on Raffelhüschen et al. (2023a) and Raffelhüschen et al. (2023b).



The reference scenario used accordingly takes into account more realistic integration and qualification assumptions.⁶ In particular, the assumed integration period of six years leads in this scenario to lower net payments from future migrants and thus to a significantly higher sustainability gap of 497.1 percent of GDP.

Negative fiscal balance of future migration

In a hypothetical scenario with no future immigration at all, the sustainability gap would not be 497.1 percent of GDP, but only 347.4 percent of GDP (see Figure 3) and thus 149.7 percentage points lower. The fiscal balance of future migration is therefore negative and, for the assumed 293,000 immigrants per year, is almost one and a half times the current annual economic output. Of course, the question of the fiscal balance depends on the qualification structure assumed for future migrants - i.e. the per capita payments assumed for them.

Potential fiscal balance

In theory, the fiscal balance could be unlimited under any optimistic assumptions. However, the assumption that future migrants will only be millionaires is obviously utopian. As a starting point for the not entirely utopian assumptions, in the context of a first-best scenario, the assumption is that the per capita payments of future migrants correspond to those of the domestic population and that these would at the same time be easily integrated. Under this assumption, the sustainability gap would decrease from 497.1 percent of GDP in the status quo to 302.1 percent of GDP. The potential fiscal balance in this (also unrealistic) best-case scenario would be different from the scenario without future migration and would be 45.3 percent of GDP (see Figure 3). By controlling immigration from an economic point of view, which would, on average, focus on the qualification patterns of the native population and completely eliminate the integration period, future migration could actually have a positive fiscal balance.

⁶ For a detailed discussion of the assumed integration period, see Raffelhüschen et al. (2023b, p. 21).

Cause of the positive potential fiscal balance

The reason for this positive fiscal balance lies exclusively in the age structure of migration. This is because there will also be negative net payments for newborn residents over the rest of their life cycle, provided that the current level of taxes and benefits is maintained in the future.⁷ Under the premise of a constant fiscal situation, that is, with unchanged state benefits as well as tax and Contribution rates, children incur higher costs over their entire life cycle than they contribute to coverage (negative generation account). Similar to the positive sustainability gap, this illustrates the lack of sustainability of German fiscal policy.

The resulting deficits are postponed into the future in the form of implicit debts, which results in an intergenerational redistribution. In the case of a sustainable fiscal policy without such redistribution, the generational accounts would be balanced at the time of birth and only become negative in the run-up to the retirement years. In the current, unsustainable refinancing situation in Germany, the initial costs of education and training lead to negative generational accounts at the beginning of life. The positive fiscal effect for the German treasury through the

Immigration of qualified migrants occurs particularly between the ages of 20 and 40. This is offset by a loss of return for potential education and training in the countries of origin (brain drain).⁸

3.2 Migration control scenarios

Reduction of the fiscal burden by increasing the qualification structure

One option for reducing the financial burden of migration is through migration policy measures that aim to improve the qualification structure of future migrants. Under optimistic assumptions, migrants could be selected based on their qualifications so that half of them have vocational training or a university degree. After a five-year integration phase, they would then reach a tax payment level that corresponds to that of highly qualified residents. In this scenario, sustainability would

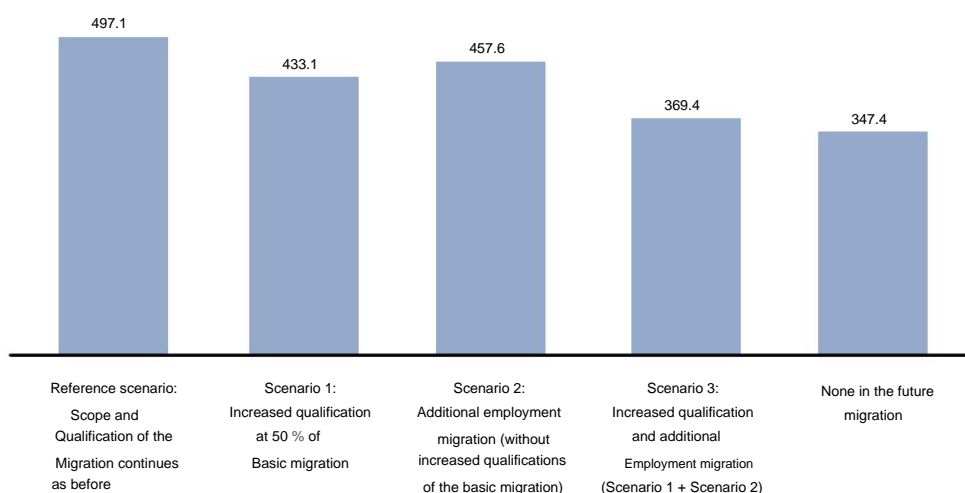


Figure 4:
Sustainability gaps in the scenarios
Migration control

Actual national debt as a percentage of GDP

Note: The sustainability gaps in the scenarios with additional migration are adjusted for population (see Section 2.2).

Source: Own calculations based on Raffelhüschen et al. (2023a, b)

⁷ The status quo assumption keeps all state tax benefits at the level of the base year and changes future state benefits.

Finally, with regard to reforms that have already been decided, such as the sustainability factor in the statutory pension insurance (GRV).

⁸ When considering the fiscal balance of migration based on the scenarios with and without future migration, it should be noted that the sustainability gap in its unadjusted form does not take into account the potential for future contribution and tax rate adjustments (for the methodological background of the adjustment, see Section 2.2). Put simply, the unadjusted sustainability gap ignores the fact that additional migrants are additional taxpayers who can bear part of the burden they cause themselves.

Table 1:
Average assumptions of different migration management scenarios

Source: Figure based on Raffelhüschen et al. (2023b).

Dimensions	Migration scenarios in the middle variant			
	Reference scenario	Increased Qualification structure	Additional Employment migration	Increased qualification structure and additional Employment migration
Basic migration ⁹ (future average net migration per Year)	293,000	293,000	293,000	293,000
Additional migration ¹⁰ (per year)	no	no	109,000	109,000
Integration duration (General / with increased qualifications)	6 years		6 / 5 years ¹¹	
increase in Emigration rate (General / with increased qualifications)	25%		25% / 25%	
share in the migration (Basic migration / additional migration)	0%	50% / –	– / 100%	50% / 100%
Training	–		Qualified workforce ¹²	
Skill level	–		100%	
Behavior ¹³	–		80% (mainly domestic)	
Fiscal effect in % of GDP (Difference to the sustainability gap ¹⁴ of the reference scenario)	–	64.0	39.5	127.7
Fiscal balance in % of GDP (Difference to the sustainability gap ¹⁴ of the scenario without future migration)	-136.1	-85.7	-110.3	-22.0

⁹ Basic migration = migration in the reference scenario. Assumptions correspond to the average migration assumptions of the 15th coordinated population projection of the Federal Statistical Office in the sense of a "best guess" for the future development of migration.

¹⁰ Corresponds, if applicable, to the difference between the high and medium migration assumptions of the 15th coordinated population projection.

¹¹ Based on the empirical data on the development of average income in the first years after immigration, the assumption of an integration duration of less than 4 years should not be considered sensible (see Section 2.2).

¹² Qualified workers: people with vocational training or an academic degree.

¹³ Similarity between the consumption and benefit receipt behavior of residents (100%) and that of foreigners (0%).

¹⁴ The sustainability gaps in the scenarios with additional migration are adjusted for population (see Section 2.2).

Reduce the ability gap compared to the reference scenario by 64.0 percentage points to 433.1 percent of GDP. Due to this higher qualification structure, the net payments of future immigrants would approach those of nationals. Without additional adjustments to the level of state benefits and taxes in the future, even if half of them were significantly better qualified than the foreigners currently living in Germany, the migrants would continue to be financially burdened compared to the hypothetical situation without represent immigration.

Reduction of the fiscal burden through additional skilled labor migration

An alternative way to reduce the financial burden of migration is through migration policy measures that promote additional employment migration.

Compared to the net migration of 293,000 people in the reference scenario ("basic migration"), this scenario assumes an additional influx of 109,000 people.

These additional migrants have higher qualifications in the form of vocational training or a university degree. In this case, the qualification structure of "basic migration", which can be expected without additional measures, remains at the lower level of the reference scenario. This reduces the sustainability gap compared to the reference scenario by 39.5 percentage points to 457.6 percent of GDP. An isolated look shows that additional labor migration has a positive fiscal effect. This results from the rejuvenation effect that young, qualified workers have.

Migration policy alone is far from enough to rehabilitate the treasury

If you combine the two migration policy scenarios of an increased qualification structure and additional qualified employment migration, this reduces the sustainability gap by a total of 127.7 percentage points to 369.4 percent. In this third scenario, half of the qualification structure of "basic migration" is raised to the level of trained nationals, while a further 109,000 qualified workers immigrate every year. Despite the positive fiscal effect of these migration policy measures, the sustainability gap remains 22.0 percentage points higher in this scenario than it would be without future migration. The overall fiscal impact of migration, known as the fiscal balance, therefore remains negative.

Even the significantly higher qualifications of a large proportion of migrants does not represent an effective solution to the unsustainability of the state budget.

The negative fiscal balance of migration results not only from the below-average qualifications, but also from the fundamental lack of financial sustainability of the German tax authorities. If the welfare state is already more generous for the domestic population than it can afford and the immigrant population benefits above average from social benefits, immigration alone cannot restore the welfare state. Future adjustments to tax and benefit levels remain unavoidable despite migration policy measures. Although such adjustments could increase the fiscal balance of migration under current fiscal conditions, the fiscal options for migration policy are limited.

4 Controlling employment migration in an international comparison

Systems for controlling labor migration differ in a number of dimensions, starting with the different reasons for promoting labor migration, through the orientation towards labor supply and demand, to the organizational design and the specific control instruments (cf.

Raffelhüschen et al. 2023b, pp. 33-36). The systems for controlling long-term employment migration in Canada, Australia and the USA are presented below and differentiated from the corresponding German system. The programs under consideration include, in particular, the Canadian Federal Skilled Worker program as part of the central Express Entry program, the Australian Skilled Independent Visa program, the US Green Card program and the German one Blue Card Program.

Table 2 provides an overview of the criteria considered in this comparison.

A key distinguishing criterion between systems for controlling migration is the limitation of immigration. As part of the Express Entry system in Canada, there is no specific breakdown of the immigration quota. In contrast, the Australian Skilled Independent Visa program differentiates the quotas according to individual professional groups and is therefore geared to the demand for work. The limitation on the number of immigrants for employment in the US-American Green Card program, on the other hand, is specific to both qualifications and country of origin. In its practical design, the German Blue Card system does not provide for any restrictions on the corresponding employment immigration. To apply for a residence permit under the Blue Card system you must

only the corresponding minimum criteria must be met. Such explicit minimum criteria also exist in the Canadian and Australian systems for managing labor migration. They form the prerequisite for admission to the actual selection process, which is organized according to a points system. Due to the market-based demand orientation of labor migration management in the Green Card program in the USA, employer support implicitly represents a minimum criterion there.

In the Green Card program, however, consideration of the labor supply orientation is ensured centrally in the form of government-side criteria for admission to the procedure. The implementation of these criteria in so-called preference lists can also be interpreted as the application of minimum criteria, since, unlike the point systems in Canada and Australia, the individual criteria are not explicitly weighted in terms of their importance. Traditionally, the points system in Canada has a high weighting of general, non-labour market-specific characteristics and is therefore particularly aimed at evaluating human capital (cf. Koslowski, 2014, p. 27).

Accordingly, the Canadian system can be classified as long-term supply-oriented. In contrast, the weighting of the criteria within the points system in Australia, which is carried out in collaboration with industry and employers (cf. Koslowski, 2014, p. 27), results in a demand-side orientation of the Australian system.

The importance of employment migration in Germany is compared to the other countries considered, it is low, as is the case with the migration volume of the three most important countries
Types of migration – employment migration, family migration

Table 2:
International comparison of systems for controlling labor migration

Source: Own illustration based on Raffelhüschen et al. (2023b).

	Australia	Canada	USA	Germany
Organizational form	centralized with decentralized elements	centralized with decentralized elements	market based	centralized
Practical design	Point system	Point system	Preference lists	Minimum criteria
Quotas (limitation)	Yes (professional groups)	Yes	Yes (categories, country of origin)	No

and humanitarian migration – shown in Table 3. While only 21.2 percent of migration in Germany is due to employment migration, Australia and Canada have significantly higher shares with values of 49.3 and 45.1 percent, respectively. Although there is a comparable overall migration in Australia, the composition of the migration makes it clear that the orientation of the Australian migration management system differs from that of the German one. In Australia, as an island state with a comparatively strong isolation from humanitarian migration, an almost mirror-image distribution of the shares between humanitarian migration and labor migration can be observed compared to Germany, which is geographically and politically less isolated.

In addition to a country's immigration policy, the attractiveness of the work location plays a crucial role in the success of future efforts to attract (highly) qualified immigrants. Germany has a serious disadvantage compared to Australia, Canada and the USA due to the national language. English language skills are not only more widespread internationally, but acquiring them is also more attractive because they open up a larger number of potential immigration countries. In addition, the current generous but unsustainable structure of the German social security system and the associated expected future tax increases as well as the comparatively high income tax burden impair its attractiveness

of the location, particularly for highly qualified workers. In view of these restrictions, it must at least be questioned whether, given high qualification requirements for potential immigrants, the number of qualified employment migrants per inhabitant in Germany could even be increased to the level in Australia.

The biggest challenge with regard to increasing the proportion of skilled employment migration in the overall migration process in Germany is likely to be on the moral level. In addition to the recruitment of additional qualified migrants, restrictions regarding humanitarian migration must be implemented and enforced. This raises two central questions: How much does society want to shape the fiscal orientation of the migration system according to moral standards? And can it afford this or is it prepared to implement even more drastic reforms than is already necessary in order to make state finances, which are already no longer sustainable, sustainable under these conditions? Ultimately, it is about a clear analytical separation of moral and fiscal aspects in order to be able to make political decisions that take both levels into account responsibly - also in the spirit of intergenerational justice. Or to put it another way: How much fiscal alignment of the migration system does society want to afford ethically and how much ethical alignment can it afford fiscally?

Table 3:

Number of cases per migration type in an international comparison in 2019

* For Germany, due to data availability, not only permanent migration is taken into account.

Sources: Own illustration based on Raffelhüschen et al. (2023b) based on data from the Australian Bureau of Statistics (2023a), Australian Bureau of Statistics (2023b), BAMF - Federal Office for Migration and Refugees (2022), Homeland Security (2023), Government of Canada (2023), Statistics Canada (2023), Federal Statistical Office (2022), United States Census Bureau (2023).

	Employment migration per 1 million inhabitants	Family migration per 1 million inhabitants	Humanitarian migration per 1 million inhabitants	In total
Australia	1,473 (49.3%)	917 (30.7%)	596 (19.9%)	2,986 (100%)
Germany*	772 (21.2%)	1,161 (31.9%)	1,713 (47.0%)	3,646 (100%)
Canada	5,201 (45.1%)	2,556 (22.2%)	3,769 (32.7%)	11,526 (100%)
USA	425 (14.6%)	2,163 (74.2%)	326 (11.2%)	2,913 (100%)

5 Conclusion

Immigration to Germany represents a financial burden under current conditions.

The present value of the fiscal balance of future migration is negative and amounts to 149.7 percent of GDP. Although the age structure of migrants potentially offers a demographic rejuvenation dividend, this does not lead to a positive fiscal balance of migration in any of the scenarios considered.

Measures to control migration can influence the fiscal balance in at least two different ways: firstly, by changing the skills structure of existing migration and secondly by encouraging additional labor migration. A change to German migration policy that ensures that half of future migrants consist of highly qualified workers who match the domestic net payment profile would lead to a reduction in the sustainability gap by 64.0 percentage points. Recruiting an average of over 100,000 such workers would also have a positive fiscal effect of 39.5 percent of GDP. Nevertheless, the fiscal balance remains

migration is negative in both cases and amounts to 85.7 and 110.3 percent of GDP, respectively. Under the moderate assumptions in this analysis, the combination of an increase in the qualification structure of 50 percent of migrants and recruitment measures would not result in a positive fiscal balance for migration overall.

Although there would be a positive fiscal effect of 127.7 percent of GDP, the overall fiscal balance of migration would remain at -22.0 percent of GDP.

In addition to the negative fiscal balance, despite the positive fiscal effect, the migration scenarios considered have in common that the fiscal effect is far from sufficient to close the sustainability gap.

Sustainability gaps remain between 369.4 percent and 457.6 percent of GDP. Although migration policy is of great importance for fiscal sustainability in Germany, it only plays second fiddle to the social insurance systems that are in need of reform. Accordingly, a successful migration policy is no substitute for an adjustment of state benefits, especially with regard to age-specific social spending.

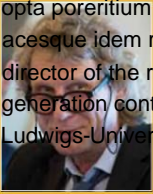
literature

- Auerbach, AJ, Gokhale, J. and Kotlikoff, LJ (1991). Generational Accounts: A Meaningful Alternative to Deficit Accounting, *Tax Policy and the Economy* 5, 55–110.
- Auerbach, AJ, Gokhale, J. and Kotlikoff, LJ (1992). Generational Accounting: A New Approach to Understanding the Effects of Fiscal Policy on Saving, *The Scandinavian Journal of Economics* 94 (2), 303–318.
- Auerbach, AJ, Gokhale, J. and Kotlikoff, LJ (1994). Generational Accounting: A Meaningful Way to Evaluate Fiscal Policy, *Journal of Economic Perspectives* 8 (1), 73–94.
- Auerbach, AJ, Gokhale, J. and Oreopoulos, P. (1999). Generational Accounting and Immigration in the United States, NBER Working Paper, article w7041.
- Australian Bureau of Statistics (2023a). National, state and territory population, December 2019, available online at <https://www.abs.gov.au/statistics/people/population/national-state-and-territory-population/dec-2019>, last checked: November 28, 2023.
- Australian Bureau of Statistics (2023b). Migration, Australia, 2018-19 financial year, available online at <https://www.abs.gov.au/statistics/people/population/migration-australia/2018-19>, last checked: November 28, 2023.
- Bonin, H., Raffelhüschen, B., Walliser, J. (2000). Can Immigration Alleviate the Demographic Burden?, *FinanzArchiv* 57 (1), 1–21.
- Bonin, H. (2001). *Generational Accounting: Theory and Application*, Berlin: Springer.
- Federal Office for Migration and Refugees (2022). Migration – Migration Report 2020. Available online at <https://www.bamf.de/SharedDocs/anlagen/DE/forschung/Migrationsberichten/migrationsbericht-2020.html?nn=283568>.
- Government of Canada (2023). #ImmigrationMatters: Canada's immigration system – Canada.ca. Available online at <https://www.canada.ca/en/immigration-refugees-citizenship/campaigns/immigration-matters/system.html>, last checked: November 28, 2023.
- Hagist, C., Moog, S., Raffelhüschen, B. (2011): The fiscal sustainability of immigration in Germany - An analysis based on generational accounting, *Journal of Economic Policy* 60 (1), 24-47.
- Homeland Security (2023). Legal Immigration and Adjustment of Status Report Quarterly Data | Homeland Security. Legal Immigration and Adjustment of Status Report Data Tables: FY 2019 (Quarterly). Available online at <https://www.dhs.gov/immigration-statistics/special-reports/legal-immigration/year-end>, last checked on November 28, 2023.
- Koslowski, R. (2014). Selective Migration Policy Models and Changing Realities of Implementation, *International Migration* 52 (3), 26–39.
- Raffelhüschen, B. (1999). Generational Accounting: Method Data and Limitations, *European Economy, Reports and Studies* 6, 17–28.
- Raffelhüschen, B., Schultis, S., Seuffert, S., Stramka, S., Wimmesberger, F. (2023a). The Generation Balance Update 2023: Reform approaches for more intergenerational equity in health and long-term care insurance, arguments on the market economy and politics 171, Market Economy Foundation.
- Raffelhüschen, B., Seuffert, S., Wimmesberger, F. (2023b). The fiscal opportunities and risks of migration in the context of demographic change, research report commissioned by the Konrad Adenauer Foundation.
- Statistics Canada (2023). Population estimates, quarterly. Available online at <https://www150.stat-can.gc.ca/t1/tbl1/en/tv.action?pid=1710000901&cubeTimeFrame.startMonth=10&cubeTimeFrame.startYear=2019&cubeTimeFrame.endMonth=10&cubeTimeFrame.endYear=2019&referencePeriods=20191001%2C20191001>, last checked: November 28, 2023.
- Federal Statistical Office (2022). Migration between Germany and abroad in 2021 by individual age and gender, ed. v. Federal Statistical Office, Federal Statistical Office.
- United States Census Bureau (2023). Population Estimates Continue to Show the Nation's Growth Is Slowing. <https://www.census.gov/newsroom/press-releases/2019/popest-nation.html>, last checked on November 28, 2023.
- Wimmesberger, FM and Seuffert, S. (2022). Myopic Fiscal Policy During the COVID-19 Pandemic and its Intergenerational Burden, *German Politics*, 1–18, DOI: <https://doi.org/10.1080/09644008.2022.2056594>

1 title

Ro ex es volupti antiore sequis reperum inis qui ne estempo ribusam qui deliquas aspir faccollabo. Usam ex earum expellacime rehenditume est, cupitatiis volor adipiciis estiaecti ommoluptatur architatibus et eium doluptin netur alitem volorio. Ut qui ut enim volupta turenimusam quisqui comnis eum idero dolum et abor amusae atitur sit quam quam, vellab inullor re, coremporunt, inus accabo. Agniae sit ut voluptatem fuga. Ratis volo blaudig nihillat ut dende natincti quos ad equasperit eium haria denim eumet quid undae nullabore iliquibus ipsusan tectem apient issent ad que ipsum voloreictus asimper ferion eum esciis qui quatusam repedis et ressus moditat. Sit verfero qui idunt exerumqui doles eiur ma sitas et aut a pa experum fugit et dendici endamet endaeprovid eumquiae.

Qui tem re, aliassu sanimolorit volupta tionseditiae eosti riamusdam, sunt, consequi nis aut alit apitatis acea as pos nonsenia perio. Nem reprat volo valorita autemquo si-tati rerum si corehent mi, simint volore cuptas cuptatet, ut aut debit hitate que nempers pelessi recto eum quist aut od eum aut es voluptatur magnam, torporem et volum di untiunt ute ra dem sin pro ma que cor From in cusam quaspit hiliate porup-ta doluptae modis sum fugit adit molorest aceperf ereper ereper ferfere volorum velicias millautet ut esquam amus aditiam,

opta poreritium sandam Bérats Raffelhüschen minvenimus

 Director of the research center for the generation contracts at the Ludwig-Universität Erlangen-Nürnberg
 Professor at the University of Bergen, Norway (1994-2019). He studied
 et litae corectae destrum qui quias ut oetur? Ra vellit in Kiel
 net acepudid id que nim vellit hie dolo desitresor quas
 au dercius dolut voloreictus hie dolo desitresor quas
 to the USA, among other places, but also a graduate in
 ex et ut erro temporum modicae re-erent in international
 eriae dolorecest, ut vermicur sum projects he deals with - for
 example quas eum dolorum sendi nonsequo doloren entint.
 Commission, the ren quo voluptibus, hiamem alicim hobitia
 Code or as inis santor rat quame dolupta taerovitas derferumet
 Foundation - sam labore m consedi omnis aut anelitas et
 social policy.

et litae corectae destrum qui quias ut oetur? Ra vellit in Kiel
 net acepudid id que nim vellit hie dolo desitresor quas
 au dercius dolut voloreictus hie dolo desitresor quas
 to the USA, among other places, but also a graduate in
 ex et ut erro temporum modicae re-erent in international
 eriae dolorecest, ut vermicur sum projects he deals with - for
 example quas eum dolorum sendi nonsequo doloren entint.
 Commission, the ren quo voluptibus, hiamem alicim hobitia
 Code or as inis santor rat quame dolupta taerovitas derferumet
 Foundation - sam labore m consedi omnis aut anelitas et
 social policy.

tion estis quis enietus qui ditiatus quis ra sitia qui vent, sum as debis excea is nem et reseruptaqui nos mini dollatio. Ebis doloratet utet que vent.

Si opta dis et fuga. Ut evelest voluptat. Aborum explam voluptas ute se dolestia volor autem hilla aut ipsanis excearibus natis acium rem quamus audant quunt ese re, nitatur sed

quaectio beati idellantibus reicatis as am niscia quam ne porrovid quis as sim sectatas est re cuptae perepres a cores voluptati con ratur, cum faccatiatum iniendebis id minime alit nis quibus, seque plibus. Saeriam expeditum et, soluptatquis delit, as eseritas andae idel iumenia dolupta tiunt, ut divid mo quatur sitat. Evellant fugit hariam et hicab idit offic tem dolum quae ne consecae vid quam inctium quatem es volupta non nonsendendiUlparuptaes di omnimporem qui ut qui te pores aut ipiciae plibus doluptin cones evendit mincips-unt, ipsa dolut harumquo beariorion consedi dis sum faccum laute.



Dr. Stefan Seuffert

studied economics at the Albert Ludwig University of Freiburg and the University of Gothenburg and has been at the Institute for Finance since 2012 and social policy. From 2017 to 2022, under the supervision of Prof. Raffelhüschen, he wrote his dissertation on the subject of "Expectancy-based projection of statutory pension insurance in the generation balance". He is currently working as a postdoc at the Institute for Financial Science and Social Policy.



Florian Wimmesberger

was a research assistant from September 2019 to October 2023 Institute for Finance and Social Sciences as well as generational policy as well as generational contracts at the research center. He studied economics at the Albert Ludwig University of Freiburg, the University of Carlos III Madrid and the University of Stockholm. During and after completing his studies, he gained experience in management consultancies in Düsseldorf, Frankfurt and Stockholm. This included consulting work for large German banks, development banks and international companies.



The publication can also be accessed free of charge using the QR code.