

Preferential Tax Schemes and High-Skilled Immigration: Lessons for Finland



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Abstract

High-skilled immigration has consistently demonstrated positive effects on firm performance, innovation, and productivity, while generally avoiding adverse impacts on native wages or employment. Consequently, many countries offer preferential tax schemes for highly skilled migrants. Recent research from the Netherlands provides compelling evidence on the impact of such schemes. In 2012, the Dutch system underwent reform, replacing a subjective "scarce skills" eligibility criterion with a transparent and relatively low income threshold. This reform significantly increased migration among mid-level earners, illustrating that migration reacts strongly to increased net-of-tax income and underscoring the importance of clear, predictable rules. We suggest that Finland should extend tax relief for highly skilled immigrants beyond the highest earners and consider implementing graduated rates.

Tiivistelmä

Erityisverokohtelu ja osaajien maahanmuutto: oppeja Suomelle

Osaajien maahanmuutolla on tutkimusten mukaan myönteisiä vaikutuksia yritysten taloudelliseen menestymiseen, innovointiin ja tuottavuuteen. Negatiiviset vaikutukset kotimaisten työntekijöiden palkkoihin tai työllisyyteen puolestaan ovat tyypillisesti vähäisiä. Näistä syistä monet maat tarjoavat korkeasti koulutetuille maahanmuuttajille suotuisaa verokohtelua. Alankomaista saatu tuore tutkimus tarjoaa vahvaa näyttöä tällaisten järjestelyjen vaikutuksista. Vuonna 2012 Alankomaiden järjestelmää uudistettiin korvaamalla subjektiivinen 'niukat taidot' -kelpoisuuskriteeri läpinäkyvällä ja suhteellisen matalalla tulorajalla. Tämä uudistus lisäsi merkittävästi muuttoa keskituloisten joukossa, mikä osoittaa maahanmuuton reagoivan voimakkaasti käteen jääviin tuloihin ja korostaa selkeiden, ennakoitavien sääntöjen merkitystä. Ehdotamme, että Suomessa laajennettaisiin korkeasti koulutettujen maahanmuuttajien verohelpotuksia myös kaikkein suurituloisimpien ulkopuolelle ja porrastettaisiin verohelpotusta Suomessa vietetyn ajan perusteella.

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The Economic Rationale for High-Skilled Immigration

High-skilled immigration brings substantial economic benefits, which are especially vital for countries like Finland that are grappling with innovation demands and a shrinking working-age population. Our aim to increase R&D spending to 4% of GDP cannot be met without substantial increase in R&D employment and one solution to meet this demand is high-skilled immigration. Moreover, studies have consistently shown that high-skilled immigration generally enhances firm performance, boosts productivity, and fosters innovation.

Highly skilled immigrants can enhance firm outcomes by introducing specialized skills that drive innovation or by complementing the abilities of native workers. Empirical research indicates that an increased local supply of immigrant labor can boost firm productivity, investment, and employment (Mitaritonna et al., 2017; Mayda et al., 2023). A study conducted in Switzerland found that easing restrictions on cross-border workers led to higher firm productivity, particularly for companies that previously faced skill shortages, and even resulted in increased wages for highly educated natives, suggesting a complementary relationship rather than substitution (Beerli et al., 2021). Moreover, restrictions on high-skilled immigration, such as changes to the U.S. H-1B program, have been shown to increase the offshoring of jobs, especially in R&D positions, highlighting the significance of local skilled labor availability for firm location decisions (Glennon, 2024).

The impact of immigrants on innovation is particularly significant. In the U.S., immigrants make up 16% of innovators but account for 23% of innovations, as indicated by patent count, economic value, and citations (Bernstein et al., 2022). Recent studies reveal that a 1% increase in immigration in the U.S. leads to a 1.6% rise in patenting and a 0.13% increase in wages over five years (Terry et al., Forthcoming). Bernstein et al. (2022) demonstrate that foreign innovators enhance the cross-border diffusion of ideas and generate positive spillover effects on the innovation output of their native collaborators. Posch et al. (Forthcoming) also indicate that cultural diversity boosts innovation by in-

creasing informational heterogeneity and diverse social interactions. Immigrants are also important for innovation in Finland, recent research showing that immigrant inventors contributed to about 20% of patents in 2021 (Koski, 2024).

Contrary to widespread public concerns, most studies indicate that skilled immigration does not adversely affect the wages or employment of native workers on average. Economic theory posits that short-term negative impacts would occur only if labor force is homogeneous and capital stock remains fixed; however, in practice, firms tend to invest in capital, thereby alleviating wage suppression. Empirical evidence from both the U.S. and Europe generally shows a neutral or slightly positive average effect on native wages and employment (Edo, 2019; Caiumi & Peri, 2024). These positive outcomes are feasible because the skills of immigrants and natives often complement each other. For instance, immigrants may introduce innovative technical skills that, when combined with the natives' understanding of the local market, result in improved products and services. Terry et al. (Forthcoming) demonstrate that in the U.S., the dynamic impact of immigration on innovation and wages outweighs the short-term negative effect on wages due to increased labor supply.

The Dutch Preferential Tax Scheme and its Impact

Many countries, including Finland, Sweden, and Denmark, employ special tax rules to attract foreign talent. A recent study examined the Dutch preferential tax scheme (Timm et al., 2025). The Netherlands provides a valuable case study of how these policies affect the migration decisions of not only top earners but also mid-level earners.

The Dutch preferential tax scheme, commonly known as the 30 percent rule, aims to attract individuals with skills that are scarce in the labor market. This scheme allows eligible employees to receive up to 30% of their gross income as tax-free payments over a specified period of time. As a result, employees' after-tax income significantly increases (approximately 15% of gross income), while employer social security contributions are

reduced. Additionally, beneficiaries have the option of wealth tax exemption, which partially alleviates foreign tax liabilities.

Prior to 2012, eligibility was determined by the subjective “scarce skills criterion.” A significant reform in 2012 replaced this with an objective income threshold, allowing employees with annual taxable income above the threshold to qualify. In 2012, this threshold was set at €35,000. This policy is noteworthy because the threshold is relatively low compared to similar programs in other countries, thereby extending eligibility to migrants with mid-level earnings, approximately the 65th percentile of the Dutch income distribution. The income threshold simplified and clarified the eligibility process.

The reform significantly increased the likelihood of eligibility for migrants whose income was just above the threshold, with the probability surging from approximately 20% before 2012 to nearly 80% after the reform.

The introduction of the threshold led to a significant increase in migration: migration more than doubled just above the income threshold, whereas inflow below the threshold remained unchanged. The estimated treatment effect for migrants with income slightly above the threshold indicates a 96% increase compared to the pre-reform average. Overall, the cumulative effect of the reform resulted in nearly 11,000 additional migrants arriving between 2012 and 2019. The enhanced transparency and predictability of the new rule were crucial; migrants applied for the tax exemption much more quickly after the reform, suggesting that they were better informed upon arrival.

This policy has proven particularly effective for migrants from non-EU countries and those employed in the business services sector. The estimated migration elasticity for mid-range income earners (100–150% of the threshold) ranged from 1.6 to 2.7, in relation to the net-of-tax rate, which is somewhat higher than most estimates for high-income migrants. This significant elasticity indicates that the reduced tax rate led to increased tax revenues, as beneficiaries continued to pay taxes on 70% of their income.

The Finnish Act on Key Employees: Current Design and Possible Enhancements

The *Finnish Act on Key Employees* (*Laki ulkomailta tulevan palkansaaajan lähdeverosta*, 1551/1995) establishes a 32% source tax on the salary income earned by eligible foreign employees. This tax replaces the progressive income tax system, which otherwise comprises municipal income tax, state income tax, and employee social insurance contributions.

To qualify for this preferential tax regime, individuals must either possess specialized professional expertise or earn a monthly cash salary of at least €5,800. Recent legislative amendments have extended the maximum duration of eligibility for this treatment from 48 months to 84 months (seven years), effective from 2024.

Although these reforms have improved the competitiveness of the Finnish system, further adjustments—drawing inspiration from the responsiveness of the Dutch “30% ruling” scheme—are desirable, and given Finland’s weak productivity growth and low birth rates, may even be necessary to sustain current living standards.

Determinants of the Attractiveness of the Finnish Regime

The attractiveness of a special tax regime depends critically on its parameters. A lower source tax rate, currently fixed at 32%, makes Finland comparatively more appealing to foreign experts. From the migrants’ perspective, the key consideration is whether the effective tax rate is sufficiently below that of the home country to justify relocation. From the host country’s perspective, determining the optimal source tax rate crucially depends on the elasticity of migration with respect to tax relief. A stronger behavioral response would justify a lower optimal rate but must be balanced against potential revenue losses.

Currently, the Act specifies a uniform tax rate throughout the eligibility period. Ropponen (in Kauhanen et al., 2024) suggests considering a graduated rate structure in which the tax rate increases with tenure under the regime. For instance, beginning with a lower initial rate and gradually phasing it upward could make the initial relocation more attractive, while also smoothing the sharp tax increase that occurs when the preferential status expires. This design could mitigate the incentive to leave Finland once the special regime ends, thereby supporting the long-term retention of skilled foreign workers. Ultimately, the stock of foreign talent—the difference between inflows and outflows—matters in the Finnish economy.

Duration of Eligibility

The duration of a special tax regime also influences its appeal. A longer eligibility period enhances attractiveness by increasing the total value of tax benefits and allowing greater adjustment to Finnish labor and living conditions. Nevertheless, the regime must remain temporally limited.

The duration of the regime must be long enough to attract prospective migrants and foster attachment to Finland, yet capped at an upper limit to ensure fiscal sustainability and equitable treatment among taxpayers. If made permanent, the scheme would become exceedingly costly for the government and create horizontal inequities, as individuals with similar incomes could be taxed differently based solely on their migration history. Hence, the preferential regime should be time-bound and subject to a clearly defined upper limit.

Currently, no empirical evidence exists on how the duration of such schemes affects either migration decisions or long-term retention, underscoring the need for further research.

Eligibility Criteria and Scope

Ropponen further questions whether eligibility criteria should be reconsidered. Under the current Act, benefits apply to individuals engaged in highly specialized tasks or earning above the high-income threshold (€5,800 per

month). However, the Dutch experience demonstrates that tax incentives can also effectively attract mid-level professionals, even when their tax advantages are smaller in both absolute and relative terms.

Finland could thus explore whether broadening the scope of the scheme to include a wider range of skilled professionals, not solely the most specialized or highest earners, would better serve national objectives. Although high-income workers generally generate the greatest value-added, mid-level professionals also contribute substantially by providing complementary expertise and by freeing highly skilled workers from lower-value tasks. Many essential functions, while not individually very productive, are indispensable to the overall economic performance.

By expanding the eligible group, Finland could enhance the overall productivity capacity of its labor market. In the Dutch reform, eligibility was extended to individuals above the 65th percentile of income distribution, which proved successful in attracting foreign professionals. In Finland, the corresponding 65th percentile is approximately €3,900 based on our calculations using the Incomes Register.

Beyond Tax Policy: The Role of Non-Fiscal Factors

Although tax incentives influence migration decisions, non-tax factors also play an important role in determining Finland's long-term attractiveness. Challenges include a high overall tax wedge, which results in comparatively lower after-tax income opportunities relative to Denmark and Norway, and persistent issues concerning social integration and inclusiveness (Kauhanen et al., 2024).

Inclusivity remains one of Finland's major barriers to attracting and retaining foreign talent. Existing studies (e.g. Ahmad, 2020b; Ahmad, 2020a) show that individuals with foreign backgrounds often face discrimination during recruitment. Thus, enhancing social openness, improving workplace inclusivity, and addressing negative public attitudes are crucial steps toward fully leveraging the potential of foreign workers in Finland's labor market.

References

Ahmad, A. (2020a). Do Equal Qualifications Yield Equal Rewards for Immigrants in the Labour Market? *Work, Employment and Society*. 34(5):826–843.

Ahmad, A. (2020b). Ethnic Discrimination against Second-Generation Immigrants in Hiring: Empirical Evidence from a Correspondence Test. *European Societies*. 22(5):659–681.

Beerli, A., Ruffner, J., Siegenthaler, M. & Peri, G. (2021). The Abolition of Immigration Restrictions and the Performance of Firms and Workers: Evidence from Switzerland. *American Economic Review*. 111(3):976–1012.

Bernstein, S., Diamond, R., Jiranaphawiboon, A., McQuade, T. & Pousada, B. (2022). The Contribution of High-Skilled Immigrants to Innovation in the United States. NBER Working Paper 30797.

Caiumi, A. & Peri, G. (2024). Immigration's Effect on Us Wages and Employment Redux. NBER Working Paper 32389.

Edo, A. (2019). The Impact of Immigration on the Labor Market. *Journal of Economic Surveys*. 33(3):922–948.

Glennon, B. (2024). How Do Restrictions on High-Skilled Immigration Affect Offshoring? Evidence from the H-1b Program. *Management Science*. 70(2):907–930.

Koski, H. (2024). Ulkomaalaisten Keksijöiden Rooli Suomalaisessa Teknologiakehityksessä. ETLA Muistio nro 138. <https://pub.etla.fi/ETLA-Muistio-Brief-138.pdf>

Mayda, A. M., Ortega, F., Peri, G., Shih, K. & Sparber, C. (2023). Coping with H-1b Shortages: Firm Performance and Mitigation Strategies. *ILR Review*. 76(5):919–943.

Mitaritonna, C., Orefice, G. & Peri, G. (2017). Immigrants and Firms' Outcomes: Evidence from France. *European Economic Review*. 96:62–82.

Posch, M., Schulz, J. & Henrich, J. (Forthcoming). How Cultural Diversity Drives Innovation. *Journal of Political Economy*.

Terry, S. J., Chaney, T., Burchardi, K. B., Tarquinio, L. & Hassan, T. A. (Forthcoming). Immigration, Innovation, and Growth. *American Economic Review*.

Timm, L. M., Giuliodori, M. & Muller, P. (2025). Tax Incentives for Migrants with Mid-Level Earnings: Evidence from the Netherlands. *American Economic Journal: Applied Economics*. 17(3):42–79.



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