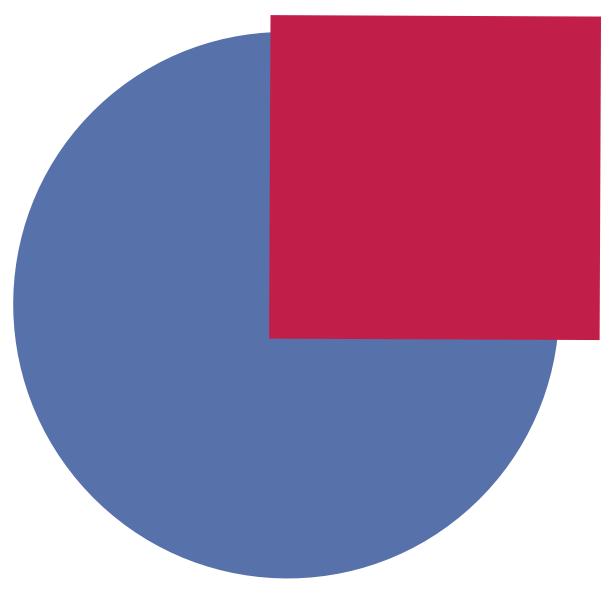
A visa for the European dream



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Foreword

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Foreword

High skilled immigrants bring skills and experience to their host country in areas to which they have already contributed in their country of origin, and which do not necessarily correspond to the strengths of lands of welcome. Economic research has thus highlighted the causal link between migration of highly specialized foreign innovators and future innovation outcomes benefiting the host country: a doubling of the number of foreign innovators specializing in certain technologies leads to a 25-60% increase in the potential of the host country to lead in these technologies over the next ten years. Moreover, the work of Gordon Hanson and Rebecca Diamond shows the broad effect that foreign innovators have on domestic R&D (patents, new products, productivity of domestic researchers): immigrant innovators directly contributed to a quarter of all patents in the United States between 1976 and 2012, and proved to be 40% more productive than the average American inventor, a striking figure cited by Antoine Levy and Victor Storchan in the policy paper that follows.

In line with the previous idea, diversity, welcoming qualified individuals who come from a variety of countries or regions of the world, is also a stimulating factor for the host country innovation. Inventors from diverse backgrounds bring complementary cultures, skills and knowledge to the comparative advantage of their host country, thus diversifying its scientific and technical production and expanding its pool of skills. Scientific and technical knowledge progresses better through the confrontation of these experiences and cultures.

Despite these clear advantages, skilled migration in the United States has been dealt a serious blow: the Trump administration drastically reduced the issuance of new visas for skilled workers until the end of the year. Most recent measures adopted by Immigration and Customs Enforcement (ICE) could go as far as to include foreign students and visiting professors to American universities.

Europe can take advantage of this American downturn if it implements appropriate and bold policies oriented toward the welcoming of qualified migrants. The policy paper by Antoine Levy and Victor Storchan proposes a plan to welcome STEM workers (researchers, innovative entrepreneurs, patent holders) based on two pillars: (i) the issuance of a five-year renewable work visa, valid throughout the EU, the replacement of non-cooperative schemes currently in place throughout Europe; (ii) a global commitment financed by the EU budget to exempt these new tech migrants from income tax for the first two years of their contract in order to make their net

remuneration more attractive.

These proposals are a step in the right direction, as they are likely to make a substantial contribution to European innovation and growth. First of all, they would strengthen private and public R&D in Europe, thanks to the induced influx of STEM immigrants. More broadly, they would restore a common and cooperative objective to European migration policy, putting Europe back on the map as a destination for skilled migrants. Finally, they would counteract or even reverse the emigration of educated and skilled Europeans to more attractive labour markets, as the positive externalities of skilled immigrants on local innovation take effect.

Executive Summary

By executive order, the Trump administration drastically reduced the issuance of new visas for skilled workers (H1B, L1 and J1) from 22 June 2020 until the end of the year. In a radical shift away from the history and ethos of the United States, this decision plunges a considerable number of international talents, scientists, researchers, engineers and students into unprecedented uncertainty. Coupled with Brexit's unpredictability, this decision offers Europe a unique window of opportunity to take a competitive edge in the global competition for talents.

In order to effectively do so, the European Union must act in line with its technological and scientific ambitions via the efficient deployment of a two-pillar strategy. First, the issuance of a five-year renewable work visa, valid throughout the EU, fostering higher mobility among skilled workers to come and create, build or innovate in Europe. This "European tech visa" would be a significant step towards a more unified skilled labour market and a major factor of competitiveness at a time when, everywhere else, borders are closing and international mobility is drying up. Second, member states of the European Union must agree on a jointly financed commitment to exempt these new migrants from income tax for the first two years of their contract, in order to make their net remuneration more attractive. Combined with European social protection and university exchange systems, these measures would form an attractive and competitive package capable of competing with powerful research funders such as Switzerland, Singapore or the Gulf countries.

In the battle for talents, a united Europe can make skilled immigration a driving force of innovation and offset emigration flows of the scientific labour force trained in Europe. Innovative companies with strong technological components, from artificial intelligence to medicine and robotics, must be able to draw on a renewed pool of global talents. The positive consequences of skilled immigration on innovation, from which the United States seems to be turning away today, have been widely documented in the economic literature: between 1976 and 2012, immigrant inventors directly contributed to a quarter of all patents in the United States, and they proved to be 40% more productive than the average American inventor.

It would therefore be a political mistake for the EU, but also a considerable economic opportunity cost, not to seize this unprecedented moment. At a time when a historic recovery plan is being drafted, the EU Heads of State and Government are expressing a desire for solidarity-based reconstruction and economic and fiscal harmonisation. A common visa and tax credit for technological and scientific talents would give a concrete effect to this effort.



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A visa for the European Dream

In the strategic battle for scientific and technical competitiveness, the European Union must develop and establish an ambitious project to attract talents. The United States ban on new visas for skilled workers (H1B, L1 and J1) that is planned at least until the end of 2020, offers a unique opportunity for the European Union not only to take gain ground in the international competition for skills, but also to make this quest for competitivity a new driver of fiscal, political and economic integration on the continent.

To achieve this ambitious objective, the EU can rapidly implement a plan based on two pillars: a European STEM visa¹ valid throughout the Union, and a temporary tax exemption for highly skilled workers from outside the EU. The combination of a major administrative simplification - in the form of an harmonised visa for highly skilled workers which should not conditioned on salaried employment - and a generous but temporary tax incentive - via the deployment of individual taxation tools backed by Community funding - would make it possible for the EU to seize a unique opportunity, specific to a particular international situation.

In addition to the obstructive repositioning of the United States towards qualified immigration, the uncertainty of Brexit shuffles the deck too. The British exit from the European Union weakens higher education in the United Kingdom by subjecting students from the rest of the Union to tuition fees aligned with those of non-Europeans. At the same time, Brexit obviates the funding of academic work by excluding British researchers from access to European Research Council grants. With the

1. Science, Technology, Engineering, and Mathematics.

withdrawal of the United Kingdom and the United States, two of the major poles of attraction in the field of higher education, the European Union may become a privileged destination for specialised workers in the STEM sectors and entrepreneurs, who are twice as mobile as other qualified employees, especially during the first years of their careers².

A European plan to welcome and integrate skilled immigrants can certainly be based on the intrinsic attractivity of the "European social model" widely shared by member states - universal health coverage covering the risks of long-term illnesses, privacy preserving work regulation, and guarantees with regards to childcare and parental leaves. However, to make Europe competitive in the international race for talents and innovation, such social benefits are insufficient if they are not supplemented by a joint effort targeting "superstar" innovators, who are particularly mobile and sensitive to economic incentives. First and foremost, a reliable access to a geographically unified, administratively flexible and economically efficient labour market would embody European will to be back as a prime destination of international mobility for the most qualified workers. To achieve this, existing mechanisms must be harmonised, jointly and cooperatively promoted by Member States and the Commission, as well as supplemented with concrete and immediate financial incentives.

A single European visa for qualified STEM workers

First of all, this European "Operation Paperclip" (named after the American strategy for welcoming German scientists after the Second World War) must be based on better coordination of policies for welcoming and attracting scientists. Existing visa mechanisms, such as the European Blue Card, must be widely extended, better promoted in public and diplomatic discourse, and adapted to the paradigm of a hyper-skilled labour market and high international mobility. Given the proliferation of and competition between non-cooperative "innovative" visa schemes in the European Union (see annex), greater readability and increased harmonisation of universalized premium migration offers must be a priority for Europe to become a major player in the international market for mobile talents.

Such an harmonization process could be carried out via the issuance of a single five-year renewable work visa, valid throughout the European Union, for qualifying workers (holders of a master's or PhD in science and technology, founders of innovative companies, or holders of patents). A "European STEM visa" of this sort, harmonised both in terms of duration and eligibility conditions

Hanson, G. H., Kerr, W. R., & Turner, S. (Eds.). (2018). High-Skilled Migration to the United States and Its Economic Consequences. University of Chicago Press.

throughout the EU, would be a powerful unifying tool for the skilled labour market across the continent, and a major competitiveness boost, at a time when everywhere else, borders are closing and international mobility is drying up. Similar mechanisms have already proven their effectiveness, notably in the United Kingdom (Global Talent Visa) or in France (French Tech Visa).

In theory, Europe already has the Blue Card, which was introduced in 2009 as a response to the American Green Card, but is for now only available to employees, with constraining and complex resource conditions, and has therefore hitherto been underused. On the contrary, a European STEM visa would be open to self-employed workers and entrepreneurs, with temporarily eased financial resources and employment conditions, but rigorous requirements of higher education qualifications (master's degree or PhD in STEM fields) or the holding of technological patents at one of the main international agencies, such as the European Patent Office (EPO) or the United States Patent and Trademark Office (USPTO).

The simplification of administrative procedures, via a European one-stop shop and harmonisation of entry conditions, will by itself increase transparency, and therefore competitiveness. It will reduce the cognitive burden currently incurred by migrants due to the complexity and heterogeneity of admission procedures to the EU and migration rights from one Member State to another. Skilled worker mobility, increased by the ever more prevalent use of telework and non-salaried employment patterns in technological sectors, makes smooth migration from one Member State to another a necessity; and requires the possibility of temporary employment contractual flexibility, without losing the benefit of the European visa. Europe must homogenize research grants, tax incentives and social benefits schemes to make the mobility within its territory more legible. In addition to harmonising entry conditions, the European Union must ensure that it speaks with one voice to promote its migration offer: the EURAXESS initiative, specifically targeted at academic research, embodies a first attempt at providing a one-stop information point for some 41 000 researchers. This experience should encourage the EU to extend such mechanisms in order to better inform highly skilled STEM workers of the advantages they can benefit from across the continent.

b. A temporary tax exemption financed by European solidarity

While administrative simplification and the unification of European labour markets can make a major contribution to the Union's competitiveness, the race for talent also means that the tax burden of the Union must be taken into account in the short term. Efforts recently undertaken by other countries, such as Canada, to counterbalance measures taken by the United States before the

November 2020 election, make it all the more necessary.

This is why EU countries could - in addition to the European STEM visa - agree on a joint commitment to exempt these new "tech migrants" from income taxation for the first two years of their contract. Such an exemption would be an efficient way to make net-of-tax earnings more competitive compared to research funding giants like Switzerland, Singapore and the Gulf countries. It would also help offset the burden of moving an entire family from one continent to another. Combined with unrivalled European social protection and university exchange systems, it would be a guarantee of competitiveness in the race for international talent.

Financing this exemption (labelled as an investment in accounting terms, in order to make it compatible with an exemption from excessive deficit procedures in the euro area) could involve a compensation fund between Member States, as part of the recovery and investment plan currently being drafted by the European Commission. Studies by Enrico Moretti and Daniel Wilson³ show how sensitive successful innovators can be to tax differentials across American states. Stefanie Stantcheva, Salomé Baslandze, and Ufuk Akcigit⁴, show a similar result for migration patterns between countries. This suggests that such an exemption could even prove a self-financing long-term investment in terms of tax revenues in Europe, especially if the EU succeeds in attracting skilled immigrants from the very beginning of their careers.

c. Crowding out, windfall gains and impact on origin countries: risk factors and potential negative externalities of tax exemptions

Such a tax exemption mechanism is subject to well-known risks. In order not to excessively focus the fiscal effort towards a small number of scientific applications, it should not be strictly sectoral. On the contrary, it must be flexible and cover a broad spectrum of research fields and sectors of technological activity, so as not to create crowding out effects between disciplines or companies. Indeed, when it comes to innovation, the promises of today promises are not always the truth of tomorrow. It is therefore difficult to predict with certainty which breakthrough technologies will generate value and competitive advantages for European industries in the future. Previous "winters" of artificial intelligence, when investment in AI collapses as a result of unsuccessful technological promises, illustrate this hazard.

Moreover, these exemptions must be undertaken in a timely manner, and their implementation must be com-

Moretti, E., & Wilson, D. J. (2017). The effect of state taxes on the geographical location of top earners: Evidence from star scientists. American Economic Review, 107(7), 1858-1903.

Akcigit, U., Baslandze, S., & Stantcheva, S. (2016). Taxation and the international mobility of inventors. American Economic Review, 106(10), 2930-81.

bined with rigorous impact studies, in order to measure their causal impact on skilled immigration, limit windfall effects, and avoid their capture by foreign workers who would have come to Europe independently of such incentives. Indeed, as the OECD's 2019 Migration Policy Debates study⁵ shows, the migration draw of countries within the EU is not homogeneous, and differs significantly, for example, between Ireland - who has already adopted a generous tax regime for skilled migrants - and Spain. The exemption could be an incentive to further harmonize tax policies in Europe, provided that it is rigorously supervised by the Commission, with much attention paid to least cooperative behaviours.

Finally, it is of paramount importance to assess the impact of such incentives on origin countries, especially among the least technologically advanced. If necessary, they should be supplemented with an effective redistribution of the fruits of intellectual property. Indeed, Mozambique's skilled emigration rate, for example, already stands at 47%, with Europe the preferred destination of more than 80% of its skilled emigrants6. Encouraging the international mobility of talents must not lead to a dry-up in domestic innovation capacity in origin countries. International scientific and technical cooperation will have to rely on the migration networks thus created. It is important to note, however, that while the net loss of value and skills in the short term for these countries is certain, other medium-term effects may prove more positive a posteriori (network effects, funding of activity in origin countries through increased capital accumulation, patronage).

d. Qualified immigration as a driving force for revitalising European innovation

Member states of the European Union have proven effective in the initial training of skilled scientists and tech workers. But so far, they failed to curb the subsequent emigration of a substantial proportion of their highly skilled scientific labor force, in fields such as artificial intelligence, medicine, economics, and social sciences, or robotics and nanotechnology. Europe also continues to lag behind in the expansion of innovative startup firms, which rarely, if ever, manage to scale up to the extent of their American or Chinese competitors.

Attracting talents and skills from all over the world is therefore a key condition for the success of the European Union in these fields. The work of Rebecca Diamond and her Stanford co-authors⁷ has shown that not only did immigrant inventors directly contribute to a quarter of all patents in the US between 1976 and 2012, and revealed themselves to be 40% more productive than the average American inventor; but also that, by improving the productivity of native scientists by more than half, they contributed to a third of scientific discoveries in 35 years! In Europe, similar work shows that this causal transmission channel from skilled immigration to innovation and productivity also operates⁸. Attracting international talent, by increasing the productivity of scientific and technical activities in the EU, is therefore the surest way of curbing the emigration of skilled young people and maintaining a strong productive base in Europe.

It would be a political mistake for the EU to leave it to others to take in the high-skill migrants who no longer feel welcome in the United States. It would also be a monumental economic opportunity cost for the EU not to seize the opportunity to foster innovation in Europe for the next decades, consolidating a central element of its autonomy and power. At the very moment when the Covid-19 crisis anchors telework in daily work habits and redefines the notion of distance, Europe can offer an immense playground for those whose productivity and creativity benefit everyone. By adopting a historic recovery plan, the EU is already displaying a strong preference for solidarity-based reconstruction, and economic and fiscal harmonisation. A common tech worker visa and tax credit for technological and scientific talent would reinforce this ambition. It is essential to attract the best talents from all over the world, be they students, scientists, engineers or high-level researchers, innovators from all over the world who can contribute to European growth and influence.

^{5.} OECD (May 2019). Migration Policy Debates.

Bosetti, V., Cattaneo, C., & Verdolini, E. (2015). Migration of skilled workers and innovation: A European perspective. Journal of International Economics, 96(2), 231-222.

Bernstein, S., Diamond, R., McQuade, T., & Pousada, B. (2018). The contribution of high-skilled immigrants to innovation in the United States (NBER Working Paper no. 3748).

Docquier, F. & Rapoport, H. (2007). L'immigration qualifiée, remède miracle aux problèmes économiques européens?.

Annex

Non-exhaustive list of European countries with special visas for innovators/entrepreneurs:

- **Germany :** European BlueCard (2012), 4 years validity, minimum income of EUR 50,800.
- Austria: Red-White-Red visa (2011), for the most qualified workers, eligibility determined by a points system.
- Denmark: Startup Denmark (2015), 2 years.
- **Spain**: Residence visa ("Highy-skilled profesion-nals"), for two years.
- Estonia: Startup visa (2017), 1.5 years.
- France: 4-year French Tech Visa (extended in 2019 to all innovative companies).
- Irelande: Highly-skilled occupations regime, lasting two years.
- Italy: Italian start-up visa (2014), lasting one year.
- Latvia: Startup Latvia visa, 3 years.
- The Netherlands: Dutch startup visa (2015), one year duration.
- **Portugal**: Startup visa and TechVisa (2019), lasting two years.
- United Kingdom: Tier 1 Exceptional Talent visa, now the Global Talent visa (2014), TechNation visa (5 years).

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