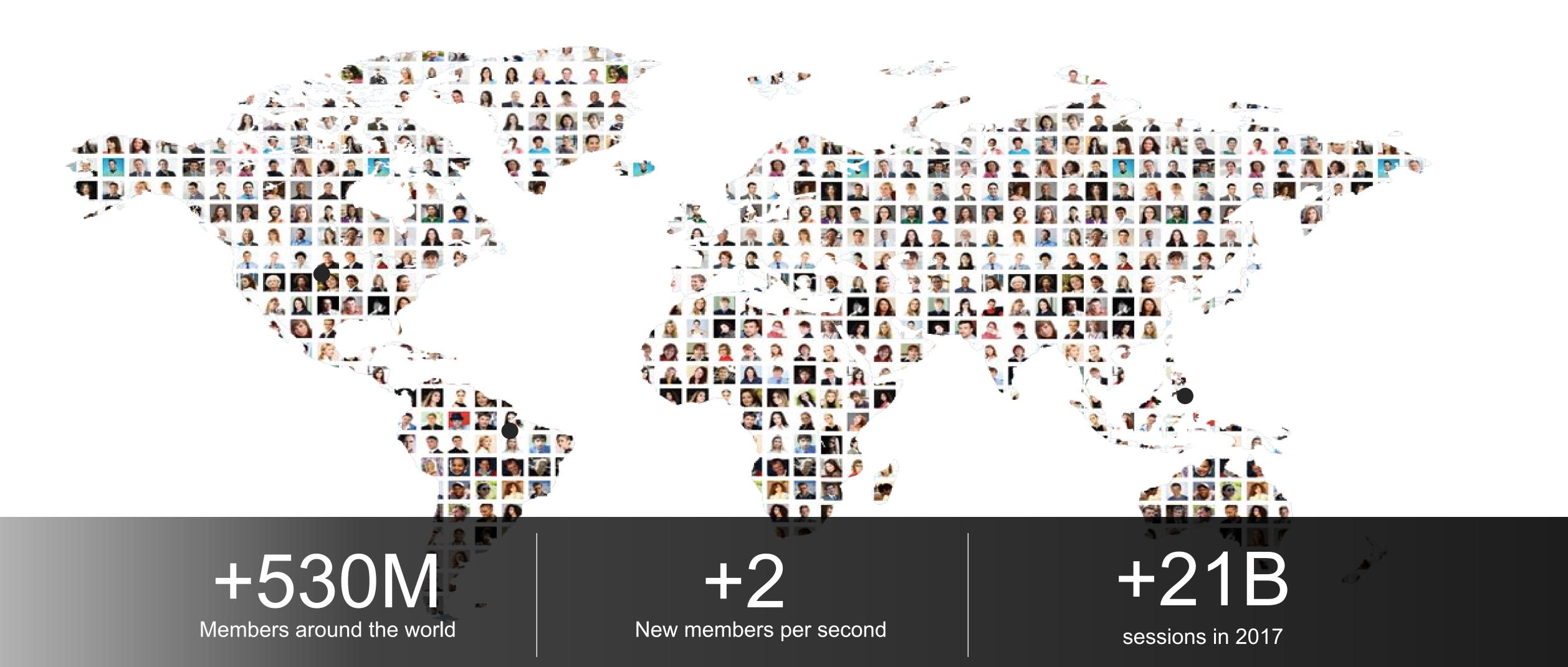


European Commission – Joint Research Centre (JRC)

Brussels, 30 November 2017

# The World's Largest Professional Network





## LinkedIn in the EU

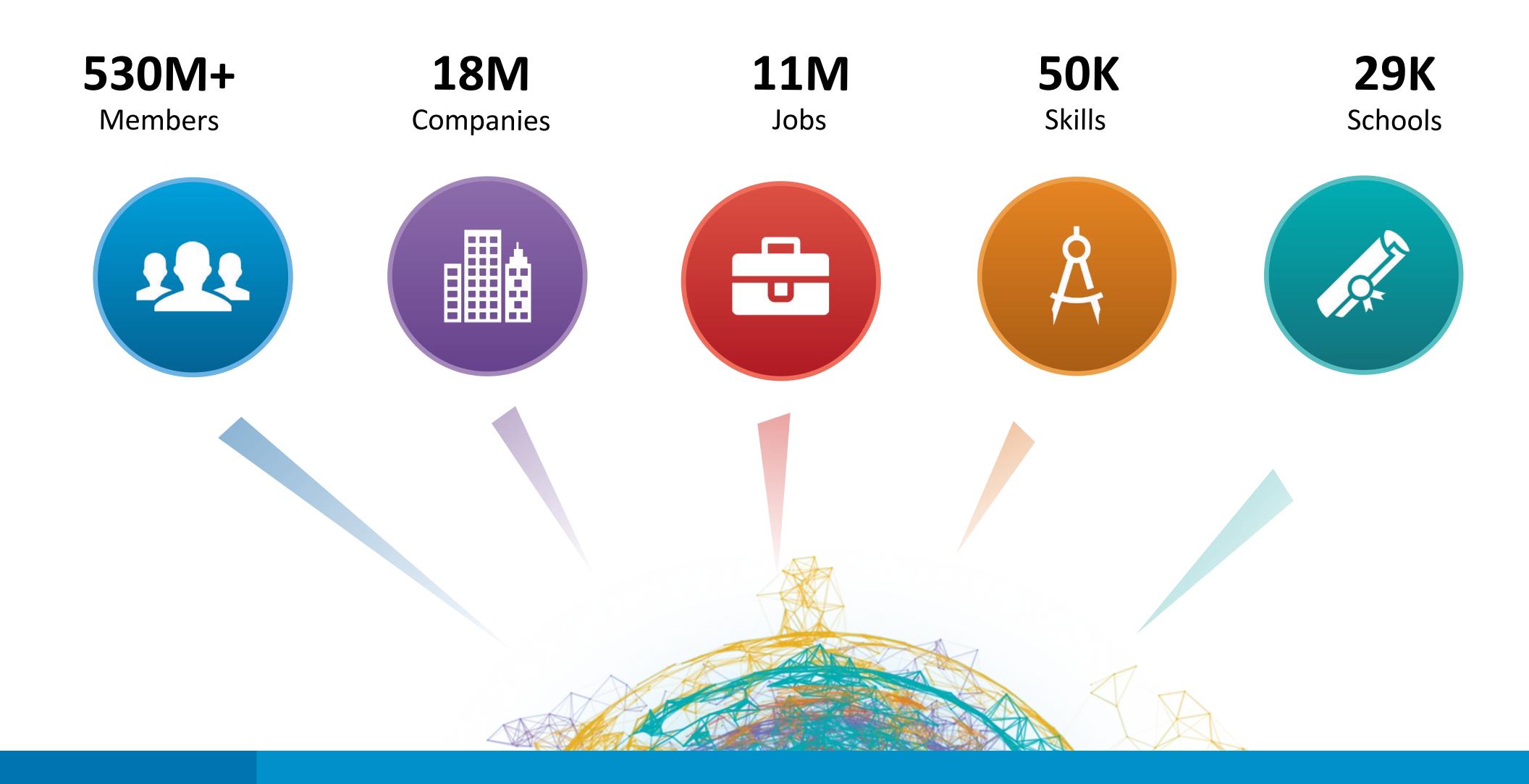






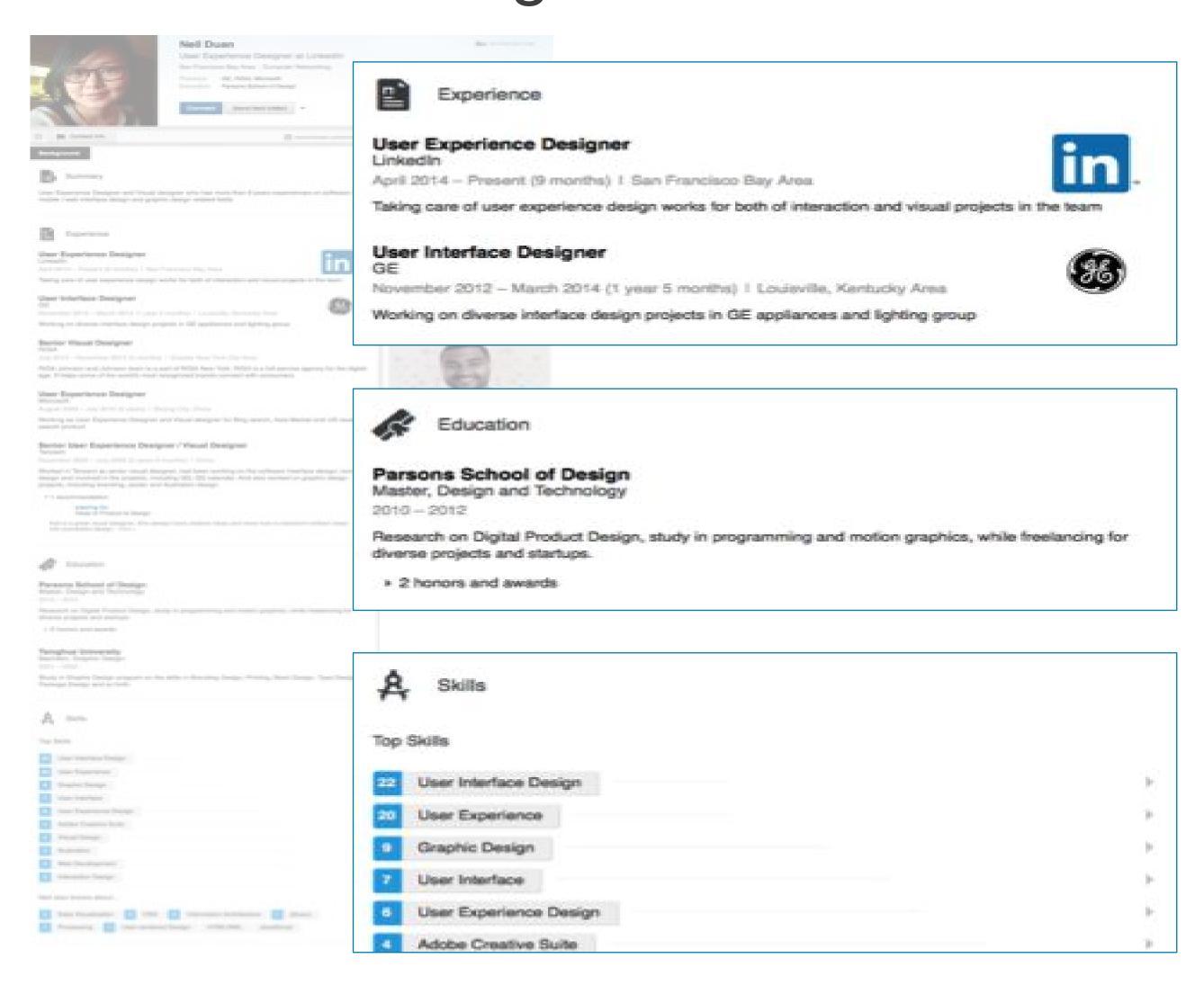
# The Economic Graph

Creating a digital map of the global economy





# Member profiles make up a rich data set that LinkedIn aggregates to understand a region's labor market



## **Jobs**

Members indicate their job history in the experience section of their profile. When a new position is added with a different location or employer, LinkedIn uses these signals to uncover trends. Information is always summarized to protect individual member privacy.

### Education

Members indicate their academic achievements in the education section of their profile, such as their higher education organization and degree type.

### Skills

Members indicate their expertise within the skills section of their profile. LinkedIn clusters the tens of thousands of individual skills that members choose to display on their profile into categories for analysis.

### **Technology**

Software Engineering Management

Software Modeling and Process Design



## The Economic Graph - Two use cases

- 1. Health & Vibrancy of Local Labour Markets
- 2. Talent Flows and Labour Mobility

## Health & Vibrancy of Local Labour Markets

Helping policy makers around the EU to make smart workforce investments



Bruxelles attire les professionnels internationaux et les métiers technologiques



LINKEDIN PRESENTA IL MILAN ECONOMIC GRAPH, LA METROPOLI LOMBARDA UN VERO E PROPRIO HUB DEL BUSINESS A LIVELLO NAZIONALE E INTERNAZIONALE

Pioneering LinkedIn project to change the face of recruitment in Manchester

## Le conseil régional des Hauts-de-France s'associe à LinkedIn

Le conseil régional Hauts-de-France a conclu un partenariat stratégique sur l'emploi avec LinkedIn, le premier réseau professionnel en ligne en France et dans le monde 530 millions de membres dont 15 millions en France.

### MAYOR OF LONDON

LinkedIn have created an Economic Graph for London that looks at technology skills in London's labour market. It provides real time data such as the fastest employers of tech talent in the private and public sectors, and shows that London's LinkedIn users have a comparative advantage to the rest of the UK in skills such as Cloud and Distributed Computing, Machine Learning and Software Code Debugging.









# Brussels region members with these skills are very likely to have started a new position in the past 12 months

25% of members with Perl/Python/Ruby have started a new position last year

1	Perl/Python/Ruby	25%
2	Mobile Development	24%
3	SEO/SEM Marketing	23%
4	User Interface	23%
5	Statistical Analysis and Data Mining	22%
6	Social Media Marketing	22%
7	Economics	21%
8	Mathematics	21%
9	C/C++	21%
10	Marketing Demand Generation	21%



## Today - Two use cases

- 1. Health & Vibrancy of Local Labour Markets
- 2. Talent Flows and Labour Mobility

# Job changes happen everyday, and in aggregate we can spot talent migrations...



Experience

#### **Research Consultant**

LinkedIn

August 2011 - Present (2 years 10 months) | Mountain View, CA



I answer some of LinkedIn's toughest questions by designing insightful research programs at the interface of big data and user behavior. Along the way, I tell compelling stories about how the world works by analyzing LinkedIn data.

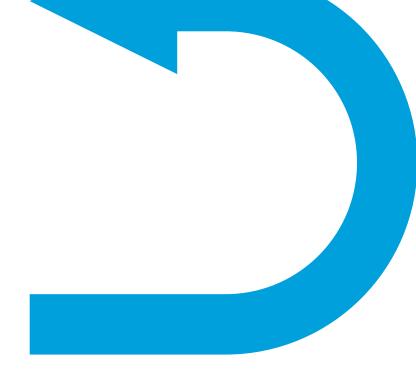
#### **Products Researcher**

Procter & Gamble

June 2007 - August 2011 (4 years 3 months) | Cincinnati Area



I developed new laundry detergents for Tide and Gain that prevented clothes from getting dirty and made them smell better for longer. I ended my days looking fresh and smelling really, really good.







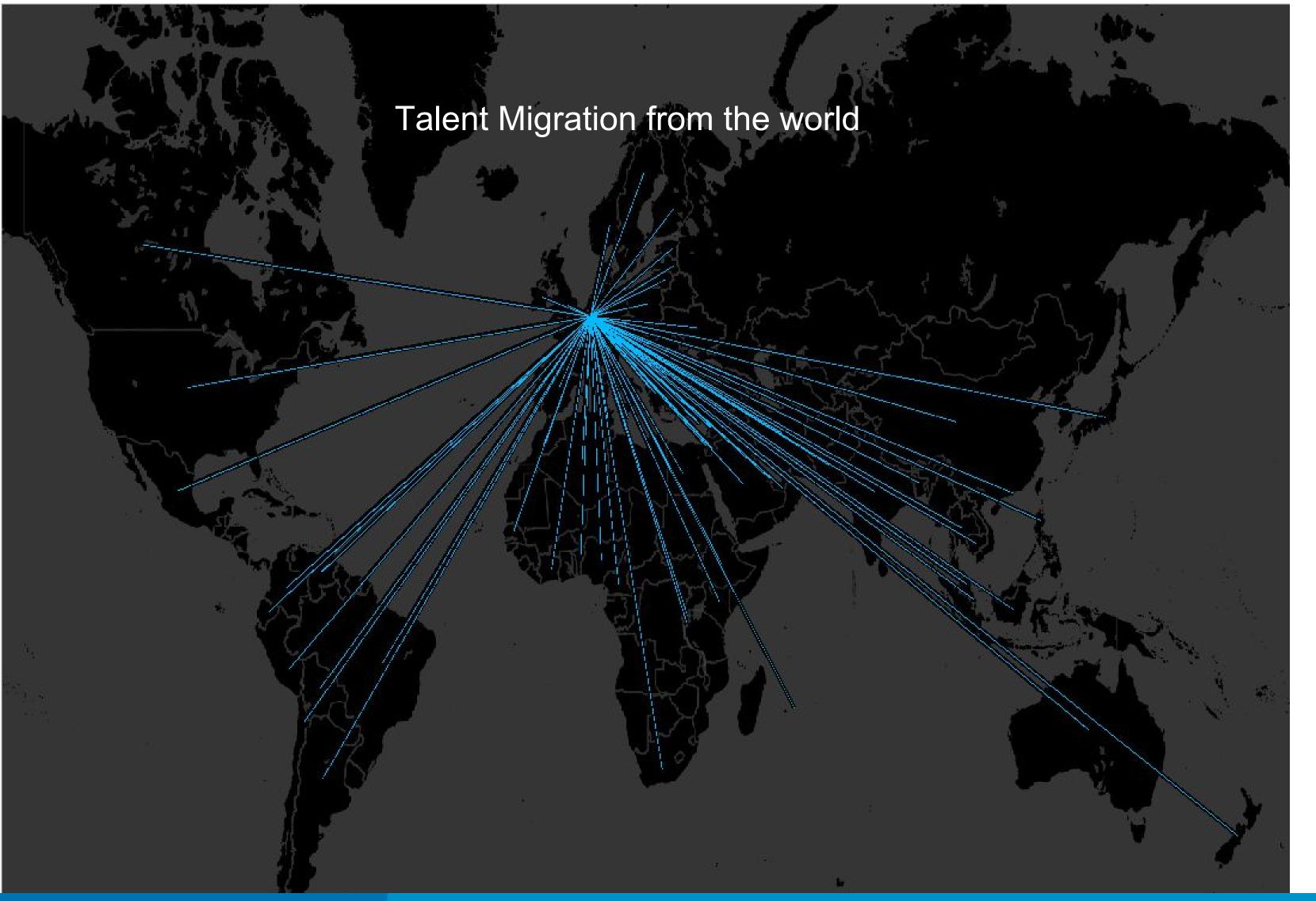


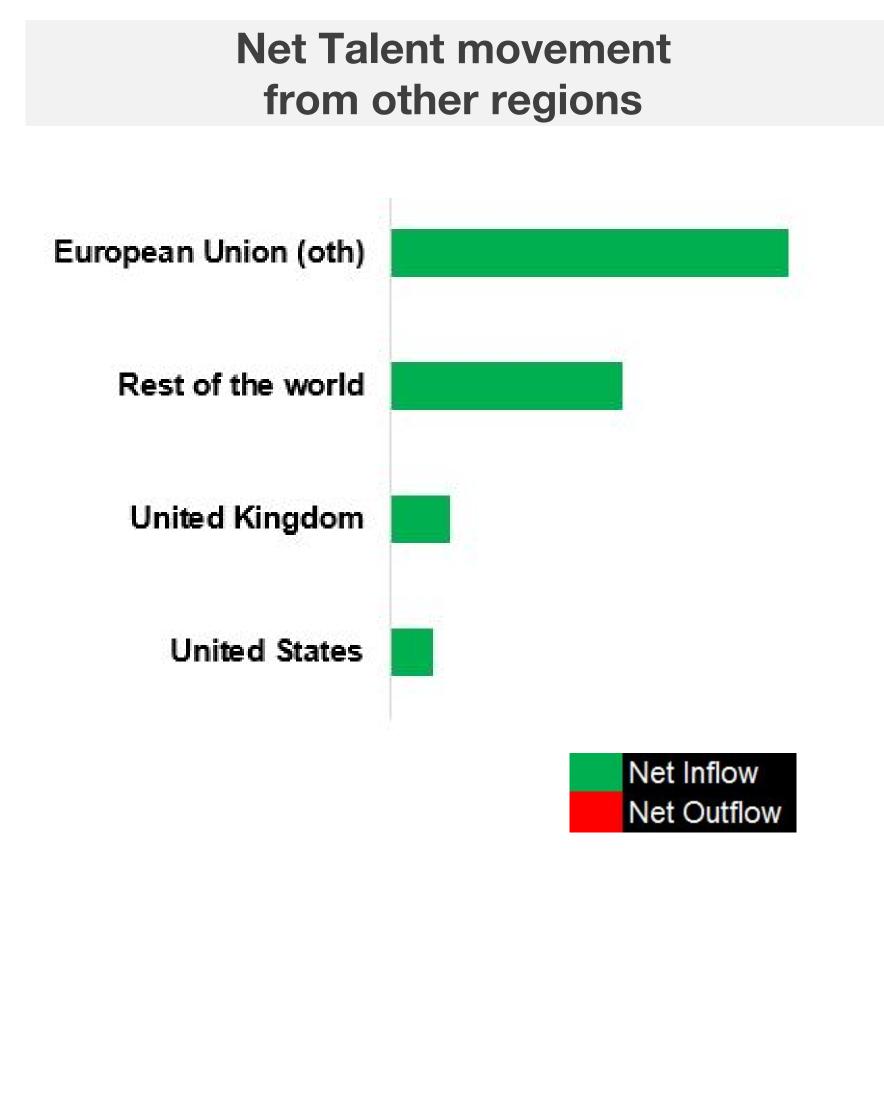






## Members arrived from 188 countries into Brussels region

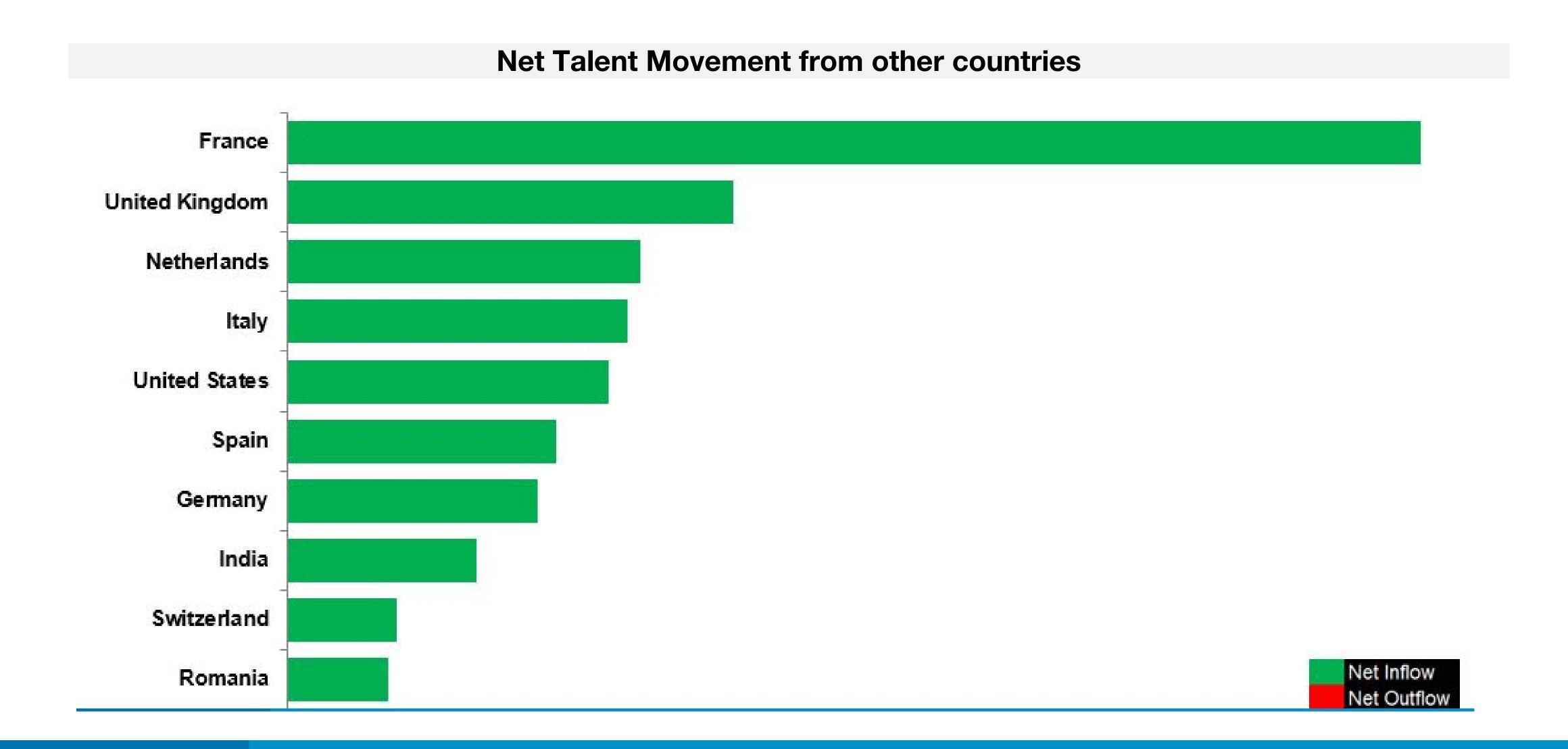








## Brussels region is gaining 18 members for 1 emigrated member

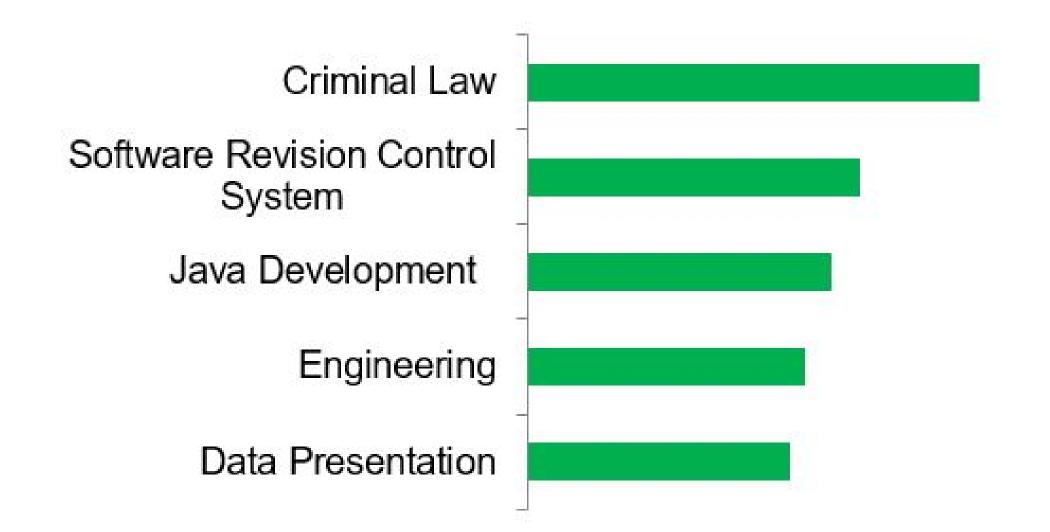




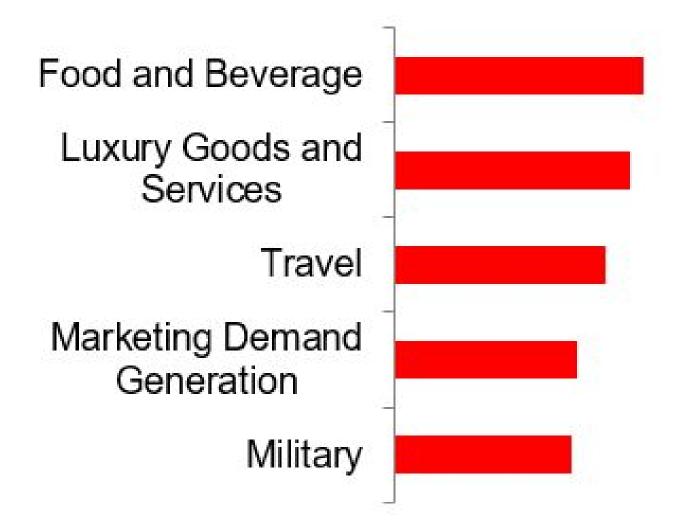


## Impact of migration to Brussels on skills

## Migration has impacted on the pool of skills in Brussels region



There was a net increase of 3% in the number of people with Criminal Law skills as a result of migration.



There was a net decrease of 2% in the number of people with Food and Beverage skills as a result of migration.





# How mobile is tech talent? A case study of IT professionals based on data from LinkedIn

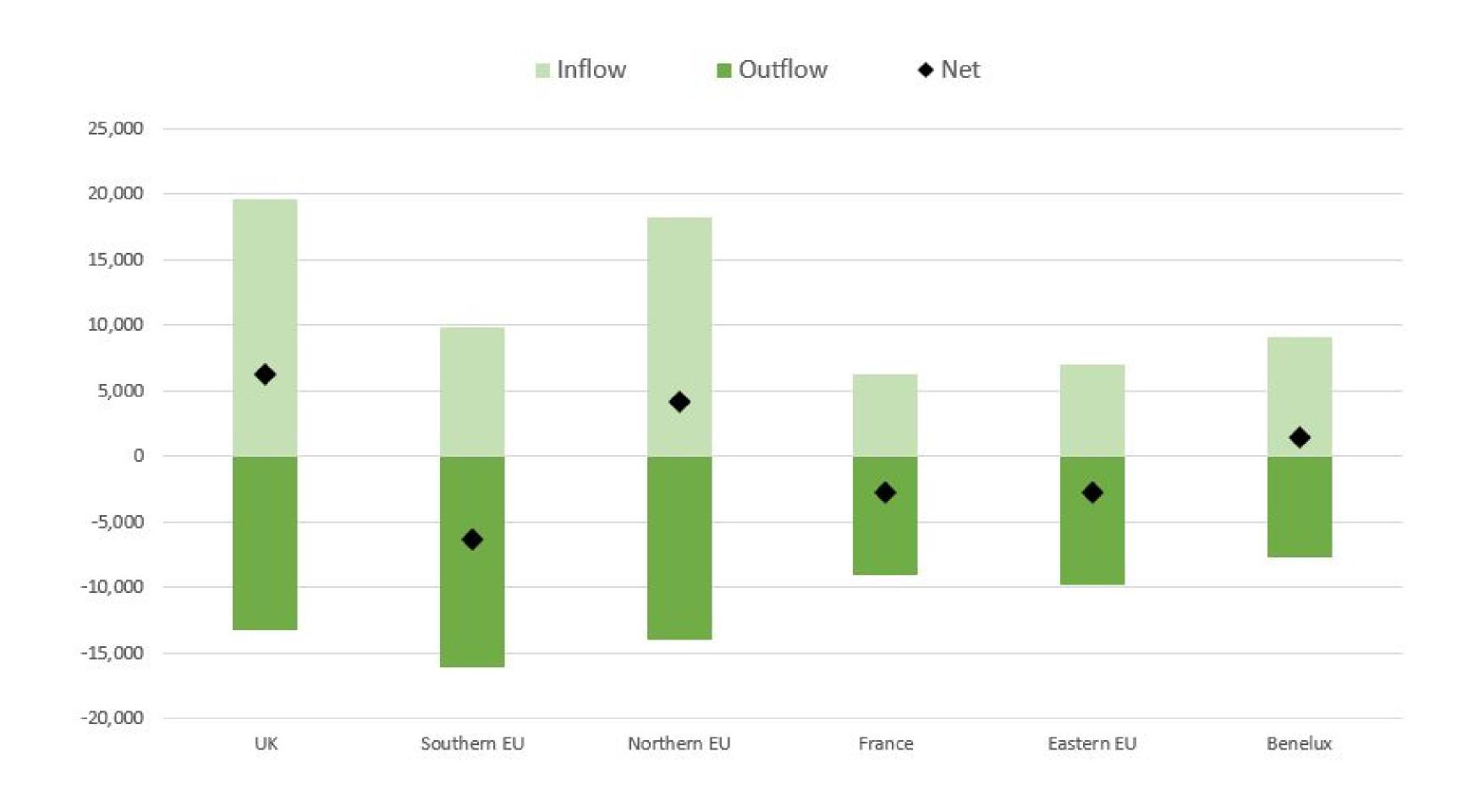
- Intra-EU flows of IT professionals follow a general pattern of mobility: from east and south to west and north. Net flows are substantial and more so for recent graduates.
- The EU is losing tech skills to the US especially those possessed by new graduates.
- The EU is also losing on quality the best educated are more likely to leave. This is also the case for intra-EU flows.

# Programming Brexit: How will the UK's IT sector fare?

- A snapshot of IT talent flows between the UK and the EU during 2014
- Half of all EU migration by IT professionals involves the UK
- The UK is a net importer of IT talent
- IT professionals arriving from the EU were roughly twice as likely to hold a Masters and twice as likely to have a PhD than those in the UK



# Intra-EU mobility - who gains?





# Mapping the Global Economy

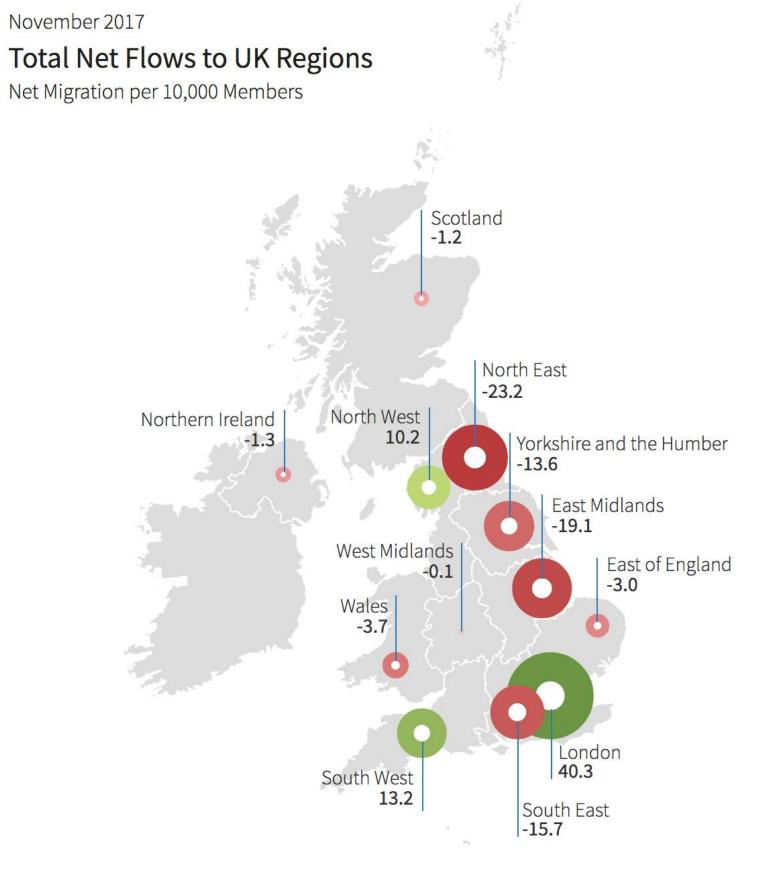


Net migration patterns of LinkedIn members with STEM skills, who moved a distance of at least 1,000 miles

## UK Workforce Report

## Migration

- London attracts net flow of talent, both from all the other parts of the UK and also from abroad
- South West and the North West also attract net flows
- 10 out of 12 of the UK regions and nations attract international net flows of talent



We define migration as a member changing their location on their LinkedIn profile. This chart shows the total net movement of workers into or out of the UK's 12 regions in the past 12 months. So for every 10,000 LinkedIn members in London, there was a net change of 40.3 workers from within the UK since Oct. 2016.





## in

# THE ECONOMIC GRAPH

Learn more at economicgraph.linkedin.com