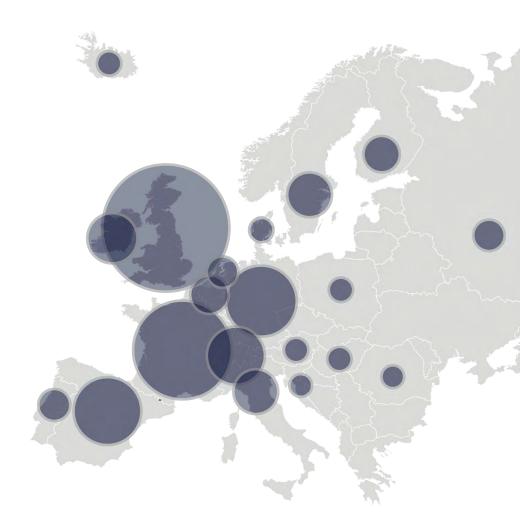
# Scaling forces of firms, cities and regions

the word to Prof. Dr. Frank van Oort Instead of the often predicted "death of distance", arguing that improved ICT-networks facilitate footloose entrepreneurs and firms and defy locational advantages<sup>5</sup>, we notice increased and selective agglomeration: a few cities and regions form spikes in the economic landscape of Europe, increasingly attracting capital, entrepreneurs, employment, and innovation<sup>6</sup>. This year's monitor shows that the UK, Germany, and France are frontrunner regions for scaleups, and especially their capital cities London, Paris, and Berlin.

### Uncovering the secrets behind scaleup clustering

Both economists and management scientists explain this by the identification of agglomeration economies: advantages arising from the density of economies. Firms tend to cluster together, even in the ICT-age, for several reasons<sup>7</sup>. First, firms and employees better match labour demand and supply in proximity, leading to less search costs for talent, human capital, and good employers. Second, manufacturing and service industries that need subcontracting partners (input-output relations) profit from short distances and large markets in agglomerations. Third, entrepreneurs and firms profit from knowledge spillovers in cities: the collection of universities, specialised knowledge service providers and dedicated, sector-specific innovative and creative capital. These three traditional mechanisms of agglomeration are labelled localisation economies that are specific to industries, and within this portfolio knowledge spillovers and human capital have over time become more important determinants of clustering than intermediate trade relations<sup>8</sup>



Erasmus Centre for Entrepreneurship

# Scaling forces of firms, cities and regions



Prof. Dr. Frank van Oort
Professor of Urban and Regional
Economics

**Erasmus School of Economics** 

Besides localisation advantages, firms and consumers profit from indivisibilities in cities: infrastructure, the housing and real estate market, access to ports, and proximity to amenities. These urbanisation economies are part and parcel of the current economic agglomeration narrative.

### Superstar cities' compositional advantages and the trap of low growth

Not all cities have a large enough critical size or production and amenity structure to turn these assets into valueadded, cumulative advantages that surpass composition and sorting effects. Business service industries, hightech manufacturing and computer software firms grow favourably in the current knowledge economy, and when a city or region is specialised in such activities it has a compositional advantage. This explains the favourable figures in this year's monitor for computer software scaleups in London and Paris, biotechnology and life science growth sectors in Switzerland and Belgium, and high-tech systems firms in Germany and France. Being specialised in generally low-growing and less productive sectors, complementary means a compositional disadvantage. Similarly, cities may attract more skilled workers that match the high-growth industries, who usually also offer higher wages for binding talent. This appears to be the case in all well-performing locations in the monitor, cumulatively fuelling the agglomeration advantage. 'Superstar' cities and regions like London, Paris, Munich, and Berlin (that are specialised in many industries and hence are also very diverse, making them

more resilient to international industry specific shocks) have both compositional (people- and firm-based sorting) and place-based advantages- the latter being an identifiable premium on productivity and wages that rises above the compositional effects.

#### Agglomeration economies are about economies of scale and composition

It is logical that scaleup entrepreneurs and firms are especially sensitive to these scaling forces. Heterogeneity studies show that on average younger and scaling-up firms profit more from agglomeration advantages, as are new technology adaptors and firms with a larger absorptive capacity. Yet, the observed heterogeneity does not exclude different theories remaining simultaneously relevant for the firm-agglomeration thesis. It can still be that large and strong firms with the greatest ability to absorb external knowledge have a competitive urban advantage, or the small, weak firms with the most to gain, and least to lose. Alternatively, it could be average firms occupying a 'Goldilocks position' - leaking less knowledge than their strong counterparts, and having a greater absorptive capacity than weak firms. Theoretical and empirical backing exists for each of these arguments: there are more ways that lead to Rome. Interestingly, both economic and management science studies reach these explanations using different identification techniques.