ISSUE 2 of 6

Generation Y

HOW POPULATION CHANGE WILL IMPACT OFFICE SPACE DEMAND

A decline in the working population throughout Europe will have a significant impact on office space demand including:

- A reduction in demand for office space
- Changes to office space requirements based on generational shifts
- Variations in demand across sub-regions based on migration and population changes

In our introductory report on the subject of Generation Y and the subsequent impact on real estate markets, we touched on the extent to which this group of individuals is altering the employment landscape and thus the demand for workspace.

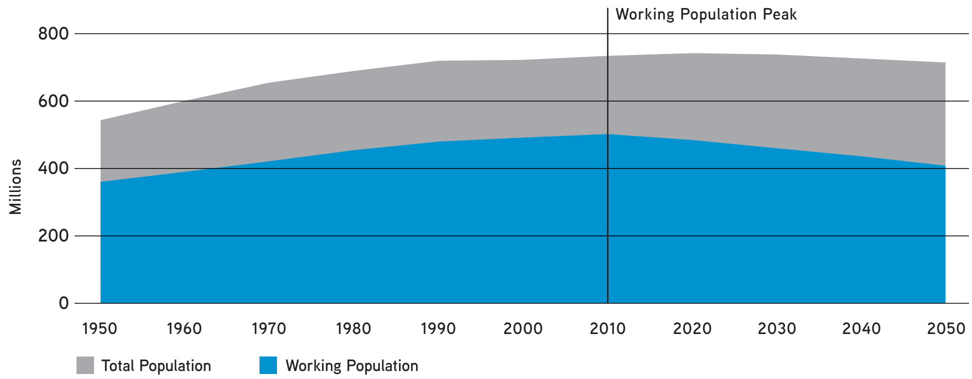
This second report examines the fundamental context behind these trends, looking at historic and forecast population change in Europe and the likely impact on headline demand for office space.

As Europe faces the prospect of a declining and ageing population, we will see a significant impact on the economy with concerns over the proliferation of public sector services in their current form and the overall stability of the pensions industry.

There will also be an impact on the real estate sector in terms of:

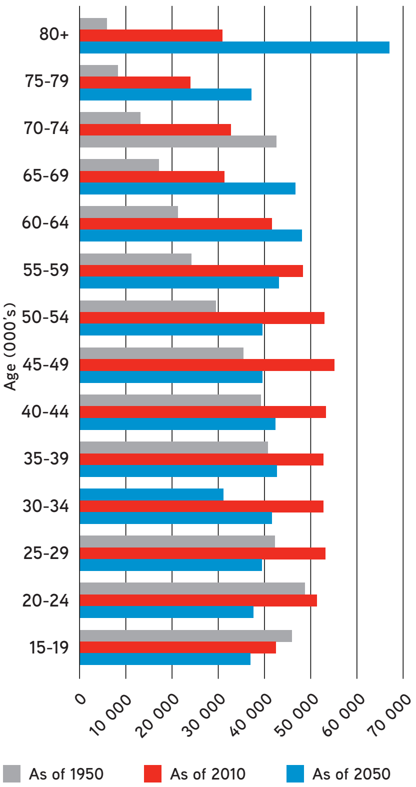
- **How much space will be required?**
- **What type of space to build and when?**
- **Which markets will be effected?**

EUROPE TOTAL & WORKING POPULATION 1950 - 2050



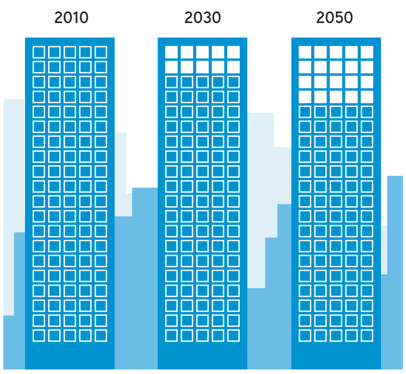
Source: UN Population Division/Colliers International

EUROPE POPULATION PROFILE



Source: UN Population Division/Colliers International

EUROPEAN OFFICE DEMAND



POPULATION CHANGE WILL CAUSE A 20% DECREASE IN DEMAND FOR OFFICE SPACE BY 2050

HOW MUCH SPACE WILL BE REQUIRED?

There is little need to embellish upon the stark fact that Europe is witnessing a population which is set to decline and age further over the next 40 years.

People are living longer, marrying/partnering later and starting families later in life and having fewer children – the result of economic and social change.

Unless there is a marked change in the way we live, combined with an increase in immigration to the continent and a significant rise in the birth rate, which is highly unlikely, this is a largely irreversible trend.

A quick look at the population profiles of Europe from 1950, 2010 and 2050 highlights this shrinking and ageing process markedly. From 1950 to 2010 Europe's population has grown in size, aged and boosted the size of the working population quite significantly (i.e. those aged 15-64).

If we look further forward, however, we can start to see the negative impact of a declining birth rate and improving mortality rate.

The recently adjusted population projections for 2030 and 2050 by the UN determine that there will be 45 million less 20-40 year-olds in the workplace by 2030 from today.

Conversely, there will be an additional 45 million 65+ year olds drawing a pension provided the retirement age remains at 65 years old (on average), although it seems more than likely to increase by at least two to three years.

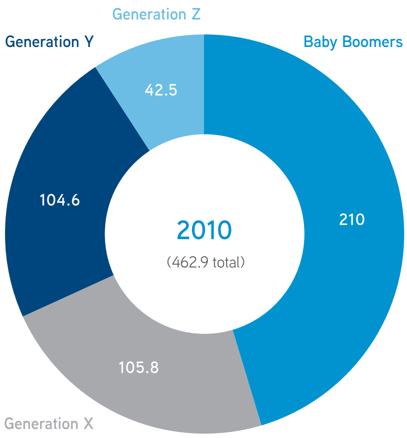
Sandwiched in the middle, the 40-65 year olds, are set to remain almost constant at around 255 million persons over this 20 year period.

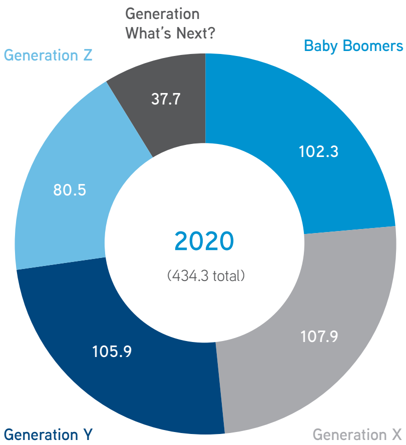
In terms of impact, a declining working population forecast creates a base case scenario of a 10% reduction in demand for commercial (office and industrial) space across Europe over the next 20 years. This will be followed by a further 10% diminution over the subsequent 20 years to 2050.

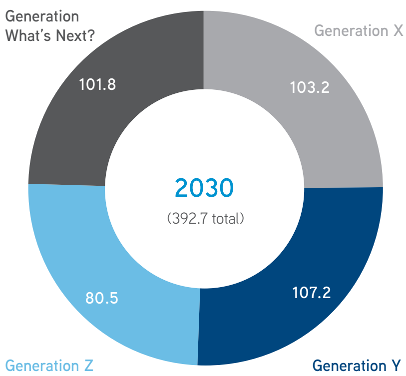
At present, it is impossible to determine exactly how much of a reduction in demand this will equate to for offices versus production and manufacturing space. There are other factors including the role of technology, expanding the use of computing and/or automation to fulfil many manufacturing/production jobs which may not always result in a requirement for less space.

Equally, the adaption of 'Alternative Working Strategies' (AWS) will alter the proportion of remote versus office-based jobs in the workforce. All of which will be explored in greater detail in Paper III in the series.

WORKING POPULATION (MILLIONS) BY GENERATIONAL STYLE







Baby Boomers: born mid 1950s-1969
Generation X: born 1970-79
Generation Y: born 1980-89
Generation Z: born 1990-99
Generation What's Next?: born 2000+

Source: UN Population Division/Colliers International

WHAT TO BUILD AND BY WHEN

In terms of determining 'what to build' and 'by when', this will be driven by the working styles and demands of the active workforce at future points in time.

Firstly, let's consider that the Baby Boomers dominate the workforce as of today (at almost 45% of the entire working population) relative to Generation X (23%) and Generation Y (22%) with Generation Z only just starting to engage the workforce (10%). As a result it is of little surprise that the demands of the Baby Boomers have been most adhered to when planning office environments. This has resulted in a high proportion of cellular office use as opposed to full open plan.

Generation Y has directly influenced the office space needs of occupiers in business sectors which embrace and rely upon a young and dynamic workforce including the Information and Communications Technology (ICT) and Business Process Outsourcing (BPO) sectors. Across more traditional business sectors demand for space is more likely to include a greater mix of styles depending on the general ethos and strategy of the company.

As we look forward we can see how much this will change.

By 2020 the influence of the Baby Boomers will have waned as it is effectively halved. Generation X will be holding most senior management positions with Generation Y and Generation Z becoming far more prominent. This will undoubtedly change workspace demands and layouts across a much wider range of business sectors – both new and traditional.

As of 2030 the Baby Boomers will be virtually non-existent within the workforce – bar any dramatic changes to the retirement age – leaving Generation Y through to Z to dominate the workforce, buoyed by the Generation which comes next. Generation X will only form one quarter of the workforce at this point in time.

We can expect a major change in the dominant style, motivation and methods of working and communicating within our modern workforce over the next 20 years, which will be reflected in the type of space demanded for use. This needs to be placed in the context of a shrinking workforce, reducing the overall demand for commercial office space.

So what does this mean for office space provision?

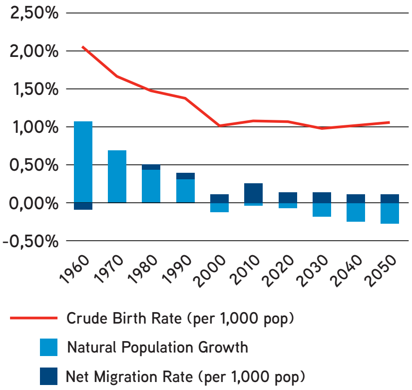
› Owning and creating the right type of space which is flexible enough to suit these changing styles and demands will be far more critical for developers and owners to take into account.

› Office buildings typically have a 20 year life-cycle, and as long-term investments are funded over a 20 year term. For banks and investors, it will be vital to ensure that your office building is future-proofed as much as possible to meet these changing demand patterns.

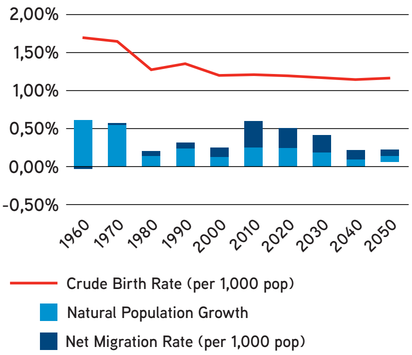
› Failure to do so could well mean higher vacancy, increased obsolescence (resulting in a requirement for higher levels of capital expenditure to upgrade stock) and lower rents. Ultimately it would mean a weaker exit yield, all of which lead to reduced returns.

POPULATION GROWTH BY SUB-REGION

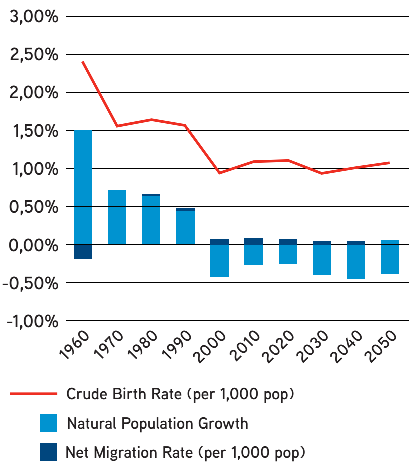
EUROPE



NORTHERN EUROPE



EASTERN EUROPE



Footnote;

› A declining population and a significantly more aged population is forecast for southern Europe.

› Population projections for western Europe are between to those of northern Europe and Europe as a whole i.e. muted growth to 2040, followed by declines.

Source: UN Population Division/Colliers International

THE PARAMETERS OF POPULATION CHANGE

The key population parameters are migration, birth and mortality rates.

In Europe the birth rate remains largely constant at around 0.9% to 1.5% over the next 40 years across all regions. It is the forecast increase in the mortality rate and the impact of net migration, however, which differ most significantly across countries and sub-regions, as highlighted in the charts to the left.

For Europe as a whole one can see that despite a steady birth rate forecast, an increasing mortality rate (as the bulk of the population has aged considerably) continues to minimise population growth long-term.

In fact, only a continued increase in net migration can realistically stem the long-term decline in Europe's population. In the current age of austerity, rising unemployment and economic and political protectionism this brings with it a whole raft of socially sensitive issues. While these European-wide trends affect everyone, the national and local impact on employment and real estate markets can and will differ strikingly.

WHICH MARKETS WILL BE EFFECTED?

In northern Europe, the overall picture is much more positive. A birth rate higher than average coupled with a mortality rate lower than average means that the natural population is forecast to grow over the next forty years. Adding increasing levels of net migration to the sub-region gives northern Europe the most positive population outlook of all the sub-regions. As a result the working population is forecast to manage marginal growth over the next 40 years, increasing by 2.18%.

This performance will be driven in large part by the UK and perhaps the quality of life offering achievable in the Nordic countries. The UK has been a preferred destination of migration in the past but questions remain as to whether the economic opportunity will continue.

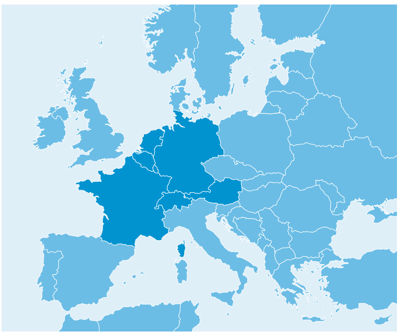
In contrast, eastern Europe, despite a continually positive birth rate is forecast to suffer from a significant increase in the mortality rate – most notably from 2025 onwards – and thus set for long-term population decline.

Interestingly, net migration in the sub-region is set as virtually zero for the coming decades meaning that long-term natural population decline cannot be offset by an influx of new migrants. As a result, the working population of the region is set to fall by a considerable 27.76% over the next 40 years. Over the next 20 years, the working population decline is forecast to be 13.97%, higher than the European average of 10%.

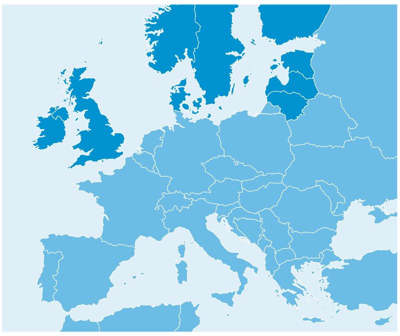
On the face of it, eastern, southern and western European office markets will feel the brunt of a reduction in the workforce, and thus the demand for office space, while northern Europe will maintain marginal growth.

But is this likely to happen? Firstly, it is vital to note that these forecasts are based on historic behaviour and trends. In the current economic and political climate such forecasts are subject to change as they do not necessarily take into account new trends which induce structural employment change or allow/cause a shift in historic migration patterns.

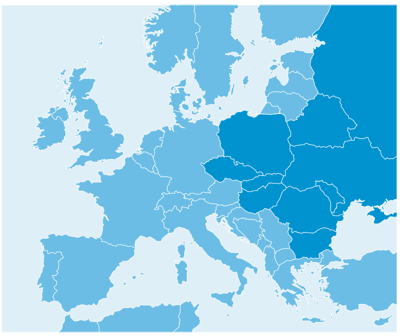
WESTERN EUROPE



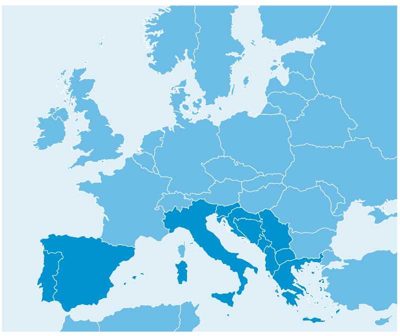
NORTHERN EUROPE



EASTERN EUROPE



SOUTHERN EUROPE



Source: UN Population Division/Colliers International

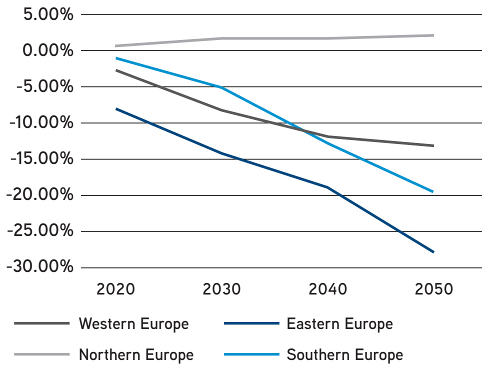
THE IMPORTANCE OF MIGRATION IN POPULATION CHANGE

Given that economic opportunity is the major driver of migration (alongside political asylum), ergo where new jobs are created the labour force will generally follow, and/or remain in situ. Historically, at least over the last 20 years, there has been a wave of migration from eastern European countries into western and northern Europe in search of economic opportunity. At present, however, western, southern and to a degree northern Europe show weak short to mid-term economic growth prospects. Concurrently, eastern European economies have continued to show positive economic growth often at faster rates than those of more mature western, southern and northern Europe.

As a result, the balance of jobs growth and potential between these sub-regions is shifting. In many respects it is shifting in favour of many eastern European countries. In large part this is a result of the positive impact of outsourcing on jobs growth in the European region, which is set to continue.

Eastern Europe continues to act as an attractive outsourcing proposition to other European and global companies wishing to diversify their operational risk, increase the flexibility of their footprint and continue to cut costs whilst maintaining and often improving their skill-base. Given that global outsourcing is set to triple over the next 10 years, according to research by McKinsey, eastern Europe is perfectly positioned to attract many of these new jobs. Critical outsourcing mass, cultural ties and proximity, high levels of education and language skills at highly competitive labour rates continue to make the region a strong location of choice. In turn this should help stem the flow of migration, and possibly induce greater net migration and repatriation (back) to the region.

WORKING POPULATION CHANGE (CUMULATIVE %) BY REGION 2010 - 2050



Source: UN Population Division/Colliers International

As a result, prospects for working population growth in eastern Europe are better than headline forecasts would suggest, but still face a downturn like the rest of Europe. Rather than the 13% fall which is forecast over the next 20 years, a base case scenario of a 10% decline would appear to be sensible. De facto, recipient markets such as northern Europe are most likely to feel this shift. Therefore, northern Europe's working population will see a marginal decline in their working population of 1.5%, as opposed to 1.3% growth. We would not expect much change to the forecasts for western and southern Europe.

To conclude, we would expect the following declines in working population by 2030 for each sub-region to be:

- Northern Europe: -1.5%
- Western Europe: -5.0%
- Southern Europe: -8.0%
- Eastern Europe: -10.0%

This will have an equivalent impact on the demand for commercial space, especially office space, in each region.

Investors, developers and financiers involved in office development and investment should consider population forecasts and trends in order to future proof the performance of their buildings as best as possible.

CONCLUSION

The global employment market has changed rapidly in the last ten years, with seven of the world's top 10 companies changing position. In such a dynamic and uncertain global marketplace anything could happen.

Despite this, we have tried to paint a picture of what is likely to happen to population change and jobs growth, taking a variety of changes and trends into account. The critical point is that Europe has already started to see a decline in the size of its workforce which will impact all markets.

Whilst all markets in Europe are forecast to see a decline in population, we believe eastern Europe is in a stronger position than UN (population) trends suggest, especially given the ability of the region to attract a continual stream of outsourcing jobs, both in terms of volume and value. This will not, however, lead to an increase in the working population of the region - we expect a decline in the working population of 10% over the next 20 years rather than circa 13%.

Equally, we would expect the other sub-regions to see declines of 1.5% in northern Europe, 5% in western Europe and 8% in southern Europe by 2030.

With regard to the qualitative demand for space, we are now starting to see the influence of Baby Boomers shrink in the workplace. With the Baby Boomer working population beginning to decline, other generations, particularly Generation Y, will start to have a stronger impact on the office space needs of occupiers.

From an employment perspective, population projections to 2030 determine that there will be 45 million less 20-40 year-olds in the workplace in Europe. This underpins an increasingly competitive environment for employers, giving younger generations much greater collective bargaining power and enabling younger generations to have greater involvement in decisions regarding the format and design of the workplace sooner than population forecasts suggest.

Within a 20 year period workspace planning needs will have significantly changed. Owners and developers will need to ensure they offer flexible office space solutions to stay ahead of, or current with, the changing needs to be competitive.

512 offices in 61 countries on 6 continents

United States: 125
Canada: 38
Latin America: 18
Asia Pacific: 214
EMEA: 117

- €1.1 billion in annual revenue
- 91 million square meters under management
- Over 12,500 professionals

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GEN Y PAPER III

In Paper III we will look at the impact of Alternative Working Strategies (AWS) and how the need for greater operational efficiency and flexibility has changed the use and type of space required. This will contain an analysis of how Generation Y (and Z) working needs and demands, combined with changes in technology, are altering workspace orientations.

Looking forward, an analysis of this evidence reflected in space plans will help determine what type of space is needed as much as simply 'how much of it'.

Furthermore will we be able to outline the impact these changes will have on the main eastern European office markets by interpreting this analysis with our base case population change scenario.

HOW CAN COLLIERS HELP?

If you are interested in what this may mean for your company and/or portfolio then feel free to contact us. We can offer a range of consulting services to clients covering the following:

- **Management Consultancy.** We can utilise a range of management tools to help analyse a clients' industry, strategic options, business pressures and issues to ensure that a client's business needs are thoroughly identified, in order to better understand their real estate requirements.
- **Location Consulting.** As an occupier we can help you best understand the ideal location for your business across EMEA taking into account the comparable cost and availability of real estate, human resources, incentives and infrastructure needs.
  We have conducted work on behalf of many companies enabling them to choose their optimal location and co-locations.
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