University of Sussex
Sussex Centre for Migration Research

Population Mobility and Regional Development

Working Paper No 74

Tony Fielding
University of Sussex
Email: a.j.fielding@sussex.ac.uk

July 2014
Abstract

Following a brief account of the way that the concepts of population mobility and regional development are used in this paper, a causal flow model of the key relationships is introduced. The main focus is the multiple ways in which regional economic development affects interregional job – and income-related migration. The arguments presented are supported by evidence from Europe (notably the UK and France) and from East Asia (notably China and Japan). While both short-term processes (business-cycle effects) and long-term (deep-structural) inequalities in job prospects and living standards are found to be significant in explaining migration flows, medium-term economic restructuring processes are judged to be particularly important – and are probably the least well understood.

Keywords:

Labour mobility; migration; economic cycle; urban and regional restructuring; spatial inequality.

Introduction

This paper is about the many relationships that exist between regional economic development and population migration. At one level these relationships are fairly straightforward – a region with high wages experiencing rapid growth is likely to attract migrants from regions that have low wages and are in decline. But, as we shall see, dig deeper, and one finds many unexpected outcomes – these relationships are often paradoxical and are not as simple as they seem.

Population mobility comes in many forms, only a minority of which will be covered here. Figure 1 shows some of these mobilities plotted on a graph with axes for distance moved and duration of stay. Broadly speaking, this paper will focus on those who move further than distances (often judged to be around one hour’s travelling time – say about 50 miles) over which people are likely to commute rather than move house, and on those who stay in the new location for longer than about six months (that is, longer than one would stay if the move was a regular seasonal migration such as for agricultural work or spending the winter months in a warm, sunny environment).

Figure 1 is, however, very useful in pointing out the fuzzy boundaries of inter-city region migration. On the lower boundary of the shaded area are the forms of mobility that lie on the border between definitive migration and temporary stay. Sometimes the intention of the person or household is to move permanently to a new city or region; but in the event, things do not work out the way they were supposed to, and the stay is cut short. More commonly, however, the shift is in the other direction. Without the intention to do so, a person’s temporary stay in a new place, perhaps to visit a relative or to do a temporary job, turns into a permanent move as friends are made, job opportunities realised, and an almost imperceptible embedding of the person in the new location occurs.
On the right-hand boundary of the shaded area in Figure 1 are the forms of mobility that lie at the border of internal (intra-national) and international migration. Some countries are so large both in population and area, and contain so many socially and culturally different city regions, that an internal migration can take on the characteristics more typical of an international migration; this is especially true of China where the household registration (hukou) system meant that, one’s social rights (to health, education, housing etc.) were restricted to one’s official place of residence, and changing that official place of residence (for example, from a rural area to the provincial capital or to one of the largest cities in the country) was, for most people, impossible. Conversely, it happens quite frequently that an international border cuts through the territory of a functioning city-region; a striking example of this is Singapore, where the island-state of Singapore constitutes only the core section of the city-region, with Johor State in Malaysia and Riau Islands Province in Indonesia forming the outer sections of that city-region.
Finally, on the left-hand boundary of the shaded area are forms of mobility that involve long-term but relatively short-distance moves. Many such moves combine housing and neighbourhood considerations with those of employment location. The solution to the problem of a long commute, for example, is, for some people, to move nearer to work; for others, especially those in a two (or multiple) job household, one person will work away from home, sometimes far away, coming back only at weekends or at the time of public holidays. Certain types of work tend to produce these kinds of arrangements – for example serving in the armed forces, working on construction sites or offshore, or in domestic/care occupations – but dual-career professional households in high-income countries are also increasingly taking this form, resulting in the acronym LAT (living apart together).

The concept of regional development is taken to mean differential urban and regional economic change (as measured by indicators such as GNP and GNP per capita, unemployment rates and standardized mortality rates) at local, city region and sub-national scales.

A schematic model of the relationships between interregional migration and regional economic growth

Absolutely central to an analysis of the relationships between population migration and regional development is the appreciation that the direction of causality can be, and typically is, in both directions; that is, rapid growth of a region’s economy will usually result in net in-
migration, and high net migration gains will usually lead to rapid growth in a region’s economy. This creates the strong possibility that there will be positive feedback loops linking, for example, migration and employment, and that processes of circular and cumulative causation will be at work (Myrdal 1957). A more recent micro-economic version of the path dependency arguments developed by Myrdal is represented by evolutionary economic geography. A representation of this approach, when applied to migration, is provided by Figure 2.

Starting in the lower left-hand corner, regional economic growth will be largely determined by national forces such as technological change and changes in consumer behaviour, mediated by both regional productivity change (investment and innovation) and the inherited regional employment structure. This employment structure, together with the volume and direction of employment change (new jobs created or lost), will largely determine the region’s in- and out-migration flows (Boyle, Halfacree and Robinson 1998). Interregional migration will affect population growth, not only directly through the net migration balance, but also indirectly through the age composition (and other characteristics) of the migrants. As regional population growth (or decline) occurs, the region gains (or loses) critical mass for its selection as a suitable location for market size- or labour pool size-related investments. Finally, interregional migration greatly influences regional economic growth through the selectivity of migration. Since migration is generally positively selective of people who have ambition and courage, have qualifications and skills, possess social and cultural capital, tend to be flexible and adaptive, and are in the young adult age groups when their economic potential is at its height, a net migration gain can bestow enormous advantage to a region’s economy. Conversely, a net migration loss can have all the opposite effects – brain drain, ageing population, and a loss of commitment to adjust or change. Interregional migration can also affect regional employment change; migrants may well only take up those jobs that are attractive – jobs that have good pay, are secure, and offer good prospects. By rejecting the other jobs, either employment growth will be stemmed, or the jobs will, instead, be filled by foreign workers. This interdependence between domestic interregional migration and international migration has become of very great significance in high-income countries around the world (see, for example, Fielding 2014 on the new immigration model applied to East Asia).

To emphasise in this way the bi-directional flow of causality between population migration and regional development and its potential to result in patterns of cumulative growth and decline, is not to deny, however, the strong logic of neo-classical economic approaches to these same relationships. Regional income convergence in the United States, for example, has been explained as resulting from the combination of the migration of labour from low-income, high-unemployment regions to high-income, low-unemployment ones (thereby raising the scarcity of labour and therefore wages in the former and reducing labour scarcity and wages in the latter), and of the flow of capital in the reverse direction – to take advantage, of course, of the lower costs of labour in the low-income region (Borts and Stein 1964; for a useful survey of migration models in this tradition see Plane and Rogerson 1994). The problem is that many of the expectations about interregional migration based upon this neo-classical economic approach are simply not borne out by the facts: paradoxically, the unemployed are, on average, rather immobile; home-owners on the other hand are surprisingly mobile; high-income cities often lose interregional migrants, on balance, rather than gain them; and low-income rural areas often gain migrants rather than lose them. More generally, those who have the greatest need to migrate (because they have the lowest incomes and live in the places with the worst economic prospects) tend to migrate the least, while
those who have the lowest need to migrate (because they are in secure, well-paid employment and live in the places with the best prospects) tend to migrate the most.

Much of the remainder of this essay is concerned with providing explanations for these anomalies while focusing on just a small part of the diagram in Figure 2 – the one-way causal link between regional economic growth and regional employment change on the one hand and interregional migration on the other. But before doing this, a note of caution is appropriate. In the past, say 50 years ago, the link between migration and employment was exceedingly close – very few could afford to live away from where jobs were located. Today, two things have changed, especially in high-income capitalist economies, to weaken this link. The first is the decline in the returns to labour relative to the returns to capital. This means that a significant proportion of people – those living off their investments – can choose to live in places that are geographically distant from the places where the economic activities on which their wealth depends, are located. Within countries, this can result in environmentally favoured regions having wealthy in-migrants and net migration gains when those regions are renowned for their low wages and high unemployment. In the UK, the classic example of this is the Southwest region and, above all, the county of Cornwall (Fielding 2012). Internationally, the benefits of this separation favour Caribbean island countries, and cities like Dubai and London. This latter migration of wealthy foreigners to London has knock-on effects on internal migration within the UK. By raising housing and other prices in London, it makes it more difficult for ordinary families (such as those of teachers and nurses) to migrate to the capital region, and at the same time encourages others to cash-in their London properties to enjoy a high standard of living elsewhere.

The second change that has weakened the link between migration and employment is communications technology. It has become possible to work physically apart from one’s work colleagues while remaining as much in contact with them as if they were in the office next door. As part of this tendency, web conferencing and online meetings have become a part of many people’s working lives. This facilitation of physical separation of home and workplace is of great importance to professional men and women in dual-career households; it has the effect of injecting flexibility into situations that might otherwise threaten career development and relationship commitments.

We now return to the economic drivers of interregional migration. The first step is to categorise the many economic processes that affect interregional migration on the basis of the time spans over which they operate. This step is essential; far too often one finds economic analyses of migration floundering due to the un-problematised conflation (for example in econometric models) of very different kinds of migration processes; specifically, business-cycle related processes are mixed up with regional economic restructuring processes, which in turn are mixed up with underlying and only very slowly changing patterns of regional inequality.

The economic drivers of interregional migration

Figure 3 is an attempt to show all the different economic processes affecting interregional migration in a single diagram. It has three layers or levels: the top layer refers to economic changes that occur frequently and quickly; they are typically related to the business cycle. The label adopted to describe these processes is ‘conjuncture’; this word was chosen because there is no term in English that matches exactly the economic use of the term ‘conjuncture’ in
French. 'Conjoncture' means the economic circumstances of the moment, which usually, in turn, means the position of that moment within the business cycle.
We know that there are close connections between interregional migration flows and the business cycle; these links operate through both the labour market and the housing market. Four stages can be identified. In stage 1, the economy is in its ‘rise’ phase; confidence is growing, firms are investing, people are moving to new jobs, and thinking about moving house. For a high-income region within a national space-economy the typical migration responses to this stage in the business cycle are: in-migration low but rising; out-migration high but falling; with house prices rising, people put their houses on the market and plan their moves to new places; with unemployment falling, people contemplate taking the risk of changing job, often with the implication that this will provoke moves to new places; the effect of these changes, which can happen quite suddenly, is net migration gain for the high-income region.

In stage 2, the economy reaches the peak of the business cycle; investment levels and job opportunities remain high, there is a lot of construction both of dwellings and of commercial property, and unemployment is low. Turnover in both the labour and housing markets is high. In-migration peaks high, out-migration bottoms out low, so high net migration gain is the result.

In stage 3, the economy is in its ‘fall’ phase; confidence is declining, firms are cutting back, people are reluctant to move to new jobs or to move house. House prices begin to fall and unemployment begins to rise. The migration responses in a high-income region are: in-migration is high but falling; out-migration is low but rising; and net migration shifts from net gain to net loss.

Finally, in stage 4, we reach the trough of the cycle – recession. Unemployment goes up sharply, house building comes almost to a halt, and confidence in the economy plummets. People and firms tend in these circumstances to ‘bunker down’, that is, to reduce their activities, expenditures, overheads and commitments, so that they can weather the economic storm and be in a suitable position to benefit from the upturn when it comes. The migration responses to recession tend to reflect the low turnovers in both the labour and housing markets; so rates of migration flow are at a very low level; in-migration bottoms out low; out-migration peaks high; and net migration loss is to be expected.

The reader will probably have noticed a contradiction in the account given above. During recession mobility rates tend to be low, and yet high net out-migration is expected. In times past, when business cycles tended to be more local, perhaps even differing from one region of a country to another, it would have been possible for the out-migrants from a region in recession to have gone to a region that was booming. But today, in general that is not what happens; globalisation tends to ensure that there is a synchronisation of business cycles, so recession tends to be the condition across a whole country, indeed across many countries, at the same time. There is, therefore, nowhere booming to go to for those who are adversely affected by recession.

Furthermore, in the real world, business-cycle migration effects tend to be modified or even overlain by migrations that are obeying a different economic logic. This point can be illustrated by looking at the migrations to and from the London city region (Southeast England) over the last forty years. It is true that migrations to and from London tend to reflect the business cycle in that they go up during boom times and go down during recession. But as a high-income region with low unemployment rates, London should logically be a region of
net migration gain from the test of the UK, and it should be gaining most by migration during boom years. This is most assuredly not the case. Most of the time London is a net loser of population through its migration exchanges with the rest of the UK, and it tends to lose most during boom times and least during recession (indeed, it has sometimes gained by migration during recession). This paradox can be explained if one focuses on the difference in the dominant stage in the life-course of migrants towards the London region from those away from the region. Those coming to London from the rest of the UK are, of course, very diverse in qualifications and social backgrounds, but they tend to be young adults from middle-class backgrounds straight out of university; they are single and they consume very little housing space. In boom years, they can go directly into well-paid employment; in recession, they enter the same or similar jobs but at a much lower level (even perhaps as unpaid internees). In other words they come to London whatever the state of the economy – whatever stage in the business cycle the economy is in (see reference to ‘escalator regions’ below). Those leaving the London region tend to be older, often much older. They are, typically, partnered with children (so there are many of them), and they are also predominantly middle-class homeowners. During recession, not only are house prices low, but it is also difficult to sell property. As the economy experiences an upturn, confidence in the housing market suddenly increases, houses become easier to sell, and the prices obtained are higher. Those migrating away from the metropolis can now ‘surf’ the high house price ‘wave’ as it spreads outwards towards the nearby regions and often, ultimately, to the whole country. They can sell high and buy low, thereby maximising the value of the assets that they have stored up in their metropolitan properties. The implications are striking: many of those who are leaving the metropolitan region are responding very intimately to business-cycle processes; in contrast, most of those who are entering the region are indifferent to these processes.

The second layer in Figure 3 refers to economic processes that take place over a much longer time-span, typically over a period long enough for three or four business cycles. These processes are called ‘economic restructuring’ because they imply new ways of organising what, how and where goods and services are produced. In this author’s judgment, the best way to envisage them is through the concepts of changing spatial divisions of labour.

In the period 1950-70 the dominant spatial division of labour was regional sectoral specialisation. What is meant by this is, firstly, that the nation-state largely defined the limits of the economy – most economic transactions were internal to the national space-economy; secondly, that regions specialised in those branches of production for which their special endowments of physical and social resources (local climates, mineral resources, labour skills, work cultures, etc.) were best suited; thirdly, the incomes earned by the sale of these goods and services to people living in other regions of the country would be used to purchase the goods and services produced in those other regions; and finally, the agency for the exchange of these goods and services would be the market – this implies that the spatial or geographical division of labour would coincide with the social division of labour, that is, the distribution that would result from market exchange. The implications of this for migration were profound. If the specialisation on which a region’s economy depended suffered decline – for example, through changing consumer preferences, technological change, or a low income elasticity of demand – then businesses would fail, jobs would disappear and out-migration would follow. In the 1950s and 1960s, most high-income countries experienced rapid rural depopulation. This came about because technological change was revolutionising food production leading to much lower labour inputs, food and agricultural products had a low income elasticity of demand (demand increased very little as incomes went up), and rural businesses in all three macro-sectors (agriculture, manufacturing, and services) tended to be
small, technically backward, labour-intensive, and uncompetitive. In contrast, large factory industrialisation and services-based urbanisation were making the cities rich in employment opportunities. The result was a mass movement from the countryside to the city. The classic study of this migration was Guy Pourcher’s account of the migration of men and women to the Paris Region (Pourcher 1964). However, rural depopulation was not the only migration pattern for this period. Old industrial areas built upon coal and steel, shipbuilding and textiles, were also losing out economically to the centres of Fordist production. By Fordist production is meant the mass production of standardised goods for mass markets – products such as automobiles, white goods such as cookers and refrigerators, and electrical goods such as radios and televisions – goods that were very much in demand during this period. Fordist forms of production called for very large workforces and very large markets; these were to be found only in the largest and wealthiest of cities – the metropolitan conurbations and national capitals.

Connecting with, and, for a time, coexisting with regional sectoral specialisation, we witness during the 1970s the emergence of a different spatial division of labour coinciding with a rapid growth in the size of both private-sector firms and of public-sector organisations – the new spatial division of labour. Instead of a region being defined by the sector of the economy that dominates its labour force, it become defined by the role that its labour force plays in the production process – as headquarters staff managing the affairs of the whole company (located in the capital city-region and/or main financial centre), as research and development staff bringing new products to market or evaluating new production technologies (located in urbanised countryside close to the metropolis or in a major university city), as skilled workers needed to produce those goods and services calling for particular knowledge or experience (located in provincial cities and in new industrial areas), and as raw labour engaged in routine unskilled production (located in regions with large labour surpluses such as agricultural regions and old industrial areas). Now the spatial division of labour coincides with the technical division of labour – that is, a planned separation of tasks designed to maximize the efficiency and/or profit performance of the whole organisation. Once again, the migration implications were profound. Since the new spatial division of labour brought the work to the workers (at the same time, incidentally, as welfare payments helped unemployed people to survive in situ) working-class migration became much less important, and indeed, in most high-income countries total interregional migration rates began to fall during this period. But, below the surface, two important new trends were developing. The first was the growth of intra-organisational transfers – as organisations managed their large and widely distributed workforces to achieve efficiency, they deployed their managerial, professional and technical staffs to their various operations located in different regions of the country. So middle-class mobility was being boosted just at the time when working-class mobility was being suppressed. The occupational class compositions of interregional migration flows were being transformed (Stillwell, Rees and Boden 1992). Secondly, the labour and other costs incurred by companies in the metropolitan cities were too high to sustain the more routine parts of their production processes. As a result, there was a major decentralisation of industrial and routine service sector employment away from the metropolitan city-regions towards small-town and rural areas where labour was cheap and plentiful. With this change in the geography of investment we see the migration ‘turnaround’ – a shift from urbanisation towards counter-urbanisation. This counter-urban migration trend of the 1970s and early 1980s was found in all high-income countries (Champion 1989); in some, notably the United States, it was largely interpreted as a response to the changing place preferences of populations (favouring the rural over the urban), but in most cases, it was seen
as being the result of shifts in the political economy of production, often combined with demographic factors (Ishikawa 2001).

From the late 1970s, building up over the next twenty to thirty years, a further change in the spatial division of labour occurs. This time the driving force is not organisational change affecting firms operating within the national space-economy, but the strong development of links that are external to the national territory – in short, globalisation. The effect of this at the level of regions within a country is to produce regional functional disconnection (Dunford and Fielding 1997); this means that regions are neither linked to each other through market mechanisms (exchanges of goods and services) nor through the planned separation of tasks (as in the new spatial division of labour), but are instead disconnected from each other – each one linked independently through global connections of ownership, management, and the flows of goods, money, information and people to places outside the national territory, to other parts of the world. The London city-region represents, perhaps, an extreme version of this process; so seemingly cut off from the rest of the United Kingdom has it become as its global city character has displaced its national and regional economic roles that it is sometimes spoken of as if it were a ‘different country’. Globalisation also weakens labour in its relations with capital allowing forms of flexible specialisation to emerge along with new industrial districts and industrial clusters. As a result of these changes, regional functional disconnection has two major implications for migration. The first is that it further reduces those many economic connections between regions that previously acted as conduits for migration (for example, intra-organisational transfers). The second is that, by forging relationships at the global scale it promotes international migration and thereby helps to bring about the new ‘super-diversity’ of metropolitan cities in high-income countries (Vertovec 2007). The social significance of these international migrations lies in the fact that they add populations at both ends of the social spectrum – both at the top in the form of highly-paid professionals and managers, and at the bottom in the form of gap-filler migrants where the immigrants do the jobs that the locals, including interregional migrants, cannot or will not do.

From about the mid-1990s on we have witnessed another change in the political economy of advanced capitalist countries – a change that has tended to focus net migration gains in the major metropolitan city regions once more. This change does not involve the end of globalisation, but rather its transformation from being primarily about the integration of markets for the production and distribution of material goods to the establishment of global networks for the trading of immaterial goods and services – a shift to what is sometimes referred to as the ‘knowledge-based economy’ or ‘cognitive capitalism’. This trend towards the financialisation and commoditisation of key social relationships and the partial replacement of wealth creation by wealth capture favours those regions that are the lynchpins of the global economy – places where rent-seeking behaviours are most likely to be rewarded – New York, London, and Tokyo, of course, but also globally significant cities like Hong Kong, Singapore, Shanghai and Mumbai.

The third layer in Figure 3 refers to economic processes that work themselves out extremely slowly, say over a person’s lifespan or over three or four economic restructurings, and are therefore called ‘deep structural’ processes; this change is so slow that it is almost imperceptible. The underlying macro-geography of wealth and poverty, both within and between countries, is the kind of thing to which label refers. At the global level, the deep structural processes include those that help to maintain the inequalities between developing and developed countries, and the slow but steady shift of wealth and power since the 1950s.
towards East Asia. At the regional (that is, sub-national) scale, certain metropolitan city-regions seem to dominate the space-economy in wealth and power from one generation to the next – Paris does so for France, Beijing and Shanghai do so for China PRC. One of the principal reasons for this stability of wealth concentration is interregional migration. These metropolitan city-regions attract ‘the brightest and the best’ from all over the country; they socially promote them at rates that are much higher than other regions; and they lose them to other regions at later stages in their careers, or at, or close to, retirement from the labour market. The metaphor of the escalator has been used to describe this process – hence these regions become ‘escalator regions’ (Fielding 1992).

**Conclusion: population mobility and regional development in Japan**

It is instructive to draw some of these ideas together through the use of an empirical example, Japan. The focus will be upon the net migration gains and losses of the three major metropolitan regions – Tokyo, comprising the four prefectures of the southern Kanto region; Osaka, comprising the four core prefectures of the Kansai region; and Nagoya, comprising the three core prefectures of the Chubu region (see Figure 4).

**Figure 4: Net internal migration 1954-2012 for Japan’s three major metropolitan regions**

- **Figures in thousands**
- **Notes:**
  - (i) data for 1954-1972 do not include migrants to and from Okinawa
  - (ii) Tokyo area: Tokyo, Kanagawa, Saitama and Chiba
  - (iii) Osaka area: Osaka, Hyogo, Kyoto and Nara
  - (iv) Nagoya area: Aichi, Gifu and Mie

**Source:** Population registers

The first thing to notice is the variability of the net migration curves, and the tendency for the peaks to coincide with periods of business confidence and the troughs with periods of economic difficulty or recession.
Secondly, the early 1970s, that is, before the oil crisis of 1974-5, marks a turning-point in the migration flows to Japanese cities. Before this turning-point, all three metropolitan regions are the beneficiaries of net migration from the rest of Japan, and the order is simple – the largest gain the most. The 1950s and 1960s were the peak years for rural depopulation in Japan, and hundreds of thousands of people, mostly young men and women from farming and small-business backgrounds, were migrating each year to the major industrial cities as regional sectoral specialization favoured these centres of Fordist production over traditional provincial Japan. After the turning-point, however, something very interesting happens – Tokyo takes off on its own as a major destination for internal migration. This is largely explained by the transition to the new spatial division of labour; Tokyo is the corporate headquarters location for Japanese domestic and international business. The 1980s was the period when these major corporations were achieving astounding success both in Japan and elsewhere, and Tokyo, not Osaka or Nagoya, was the major beneficiary of that success. Tokyo’s global-city success, however, suffered a severe blow during the Japanese financial crisis of the early 1990s; net migration gain momentarily became net migration loss, as asset values tumbled and business confidence plummeted. Since that time, significant net migration gains have returned, and held up until the current crisis starting in 2008.

But Figure 4 also shows us something else – the enduring attractiveness, throughout business cycles and restructuring periods, of the Tokyo metropolitan region to internal migrants. Tokyo is the ‘one-point concentration’ of the Japanese space-economy. If you are able, active and ambitious where do you go? You go to the centre of bureaucratic power and corporate wealth, of luxury consumption, artistic creativity and of celebrity success – you go to Tokyo. It is, itself, a major hub for university education (Tokyo University being the most prestigious in the country), but it is also the destination for many students graduating from other university cities around the country. These other university cities, especially Kyoto, but also major provincial cities such as Osaka, Nagoya, Fukuoka, Sendai and Hiroshima, act as ‘siphon cities’, recruiting bright students from nearby regions and from further afield, then channelling them on to Tokyo after graduation. And when they get there, they benefit from the massive opportunities for upward social mobility that Tokyo offers them relative to other places in Japan (especially so, incidentally, for women). In the past, once you made it to Tokyo, you stayed there. But the recent census results show that Tokyo is now joining those many metropolitan cities around the world that lose older-age migrants to provincial, coastal and rural areas as they enter retirement age groups. In all these respects, stepping on, being taken up, and then stepping off, Tokyo displays the characteristics of an ‘esculator region’ – a region that acts as a kind of permanent engine for upward social mobility within contemporary society (Fielding 1992).

Every country is unique, and Japan is arguably more unique than most, and yet it has been possible, using this example, to trace many of the key relationships between population mobility and regional development.

References


