

The Internal Dynamics of Migration Processes: A Theoretical Inquiry

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The migration literature has identified various feedback mechanisms which explain why, once started, migration processes tend to become partly self-perpetuating, leading to the formation of migrant networks and migration systems. However, existing theories on the internal dynamics of migration processes are characterised by three fundamental weaknesses. First, their focus on migrant networks coincides with a neglect of indirect feedback dynamics that operate through the impact of migration on the sending and receiving contexts, changing the initial conditions under which migration takes place. Second, existing theories are unable to explain why most initial migration moves do not lead to network migration and migration system formation. Third, their largely circular logic reveals an inability to conceptualise which migration-undermining feedback mechanisms may counteract migration-facilitating feedback dynamics and which may explain the endogenous decline of established migration systems. By drawing on various disciplinary strands of migration theory and by applying insights from the critical social capital literature, this paper proposes a conceptual framework on the internal dynamics of migration processes by elaborating a set of hypotheses on the various migration-facilitating and migration-undermining feedback mechanisms at play in the various trajectories and stages of migration system formation and decline.

Keywords: Migration Theory; Migration Systems; Networks; Feedback; Social Capital

Introduction

The idea that migration often leads to more migration is not new. The migration literature has particularly highlighted the migration-facilitating role of migrant networks. Once a critical number of migrants have settled at the destination,

migration becomes self-perpetuating because it creates the social structures to sustain the process (Castles and Miller 2009; Massey 1990; Massey et al. 1998). However, existing theories on the internal dynamics of migration processes are characterised by three fundamental weaknesses.

First, the focus on migrant networks coincides with a neglect of indirect feedback dynamics that operate through the impact of migration on the sending and receiving contexts, changing the initial conditions under which migration took place. Second, existing theories are unable to explain why most initial migration moves do not set in motion self-sustaining dynamics leading to migration system formation. It is as yet unclear under what conditions initial moves by pioneer migrants do result in expanding migration networks and the formation of migration systems, and under which conditions this does not happen. Third, their largely circular logic reveals an inability to conceptualise which migration-undermining feedback mechanisms may counteract migration-facilitating feedback dynamics and which may explain the endogenous decline of established migration systems over time. On the one hand, this is related to the failure to conceptualise exactly how changes in macro-conditions impinge on internal dynamics, highlighting the lack of connection between macro-level theories on the 'root causes' and meso-level theories on the perpetuation of migration. On the other hand, this highlights the unrealistic circular logic of existing theories, according to which migration goes on *ad infinitum* (cf. Massey et al. 1998).

In order to fill these theoretical gaps, this paper aims to outline the contours of a conceptual framework on the internal dynamics of migration processes by elaborating a set of hypotheses on the various migration-facilitating and migration-undermining feedback mechanisms at play at the various trajectories and stages of migration system formation and decline.

The paper starts by discussing existing theories on the perpetuation of migration as well as their main shortcomings. It subsequently proposes a distinction between endogenous and contextual feedback mechanisms to achieve a more comprehensive understanding of internal migration dynamics that goes beyond the usual focus on networks. The paper then identifies the main self-perpetuating endogenous and contextual self-perpetuating feedback mechanisms which can explain migration systems formation. By drawing on the critical social capital literature, the paper will subsequently hypothesise which migration-undermining feedback mechanisms can counteract the self-perpetuating dynamics of migration processes. The paper will also hypothesise why only a minority of initial migration moves result in the creation of migrant networks and full-blown migration systems. The final section will put the various theoretical insights in a dynamic perspective by proposing an ideal-typical conceptual framework of the selective and heterogeneous formation and breakdown of migration systems over time.

Migratory Social Capital: Chain Migration and Migrant Networks

'Root Causes' vs. Internal Dynamics

Migration may begin for a variety of reasons. Although the truism holds that economic and other opportunity differentials generally play a major role in migration, this alone cannot explain the actual, patterned and geographically clustered morphology of migration, typically linking particular places and regions. Structural forces majeure in the international political economy such as warfare, colonialism, conquest, occupation and labour recruitment as well as factors such as shared culture, language and geographical proximity often play a crucial role in the initiation of migration processes (Castles and Miller 2009; Massey et al. 1998; Skeldon 1997). However, once a certain critical number of migrants have settled at the destination, other forces come into play. The deliberate or more ambiguous choices made by pioneer migrants, labour recruiters or others tend to have a great influence on the location choice of subsequent migrants, who tend to follow the 'beaten track'.

The idea that migration is a path-dependent process because inter-personal relations across space facilitate subsequent migration is anything but new (cf. Franz 1939; Lee 1966; Petersen 1958). While the term chain migration had already been used by Kenny (1962) and, particularly, Price (1963), it was defined by MacDonald and MacDonald (1964) as 'that movement in which prospective migrants learn of opportunities, are provided with transportation, and have initial accommodation and employment arranged by means of primary social relationships with previous migrants' (MacDonald and Macdonald 1964: 82, emphasis in original).

This idea that social ties based on kinship and community membership facilitate processes of chain migration has been further elaborated by Tilly and Brown (1967) and Choldin (1973) and has retained currency in the migration literature. In the recent literature, the term network migration has gradually replaced chain migration. Migrant networks can be defined as sets of interpersonal ties that connect migrants, former migrants and non-migrants in origin and destination areas through bonds of kinship, friendship and shared community origin (Massey et al. 1993: 448).

Migrant Networks as Social Capital

A migrant network is a location-specific form of social capital (cf. Massey et al. 1998). Bourdieu (1979; translated in Bourdieu 1985) defined social capital as 'the aggregate of the actual or potential resources which are linked to the possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition*or in other words, to membership in a group' (Bourdieu 1979: 2, emphasis in original French version). Bourdieu made an essential*but often ignored* distinction between the networks themselves and the resources that can be mobilised through such networks. After all, the volume of the social capital possessed by a person depends on, first, the size of the network connections and, second, the volume of the (economic, cultural or symbolic) capital possessed by each of those to whom she or he

is connected. This distinction has been largely ignored by many later interpretations of the term 'social capital' as well as its application to migration theory. However, as we will see, this distinction is essential for understanding how social capital can produce and reproduce inequality in network migration.

Bourdieu argued that the benefits which accrue from membership of a group are consciously or unconsciously the basis of the solidarity which makes them possible (Bourdieu 1979, 1985). Social capital classifies as 'capital' because it is a resource that can be converted into other forms of cultural, human and economic capital (Bourdieu 1985; Coleman 1988; Portes 1998). Migrant networks can then be conceived as a form of location-specific social capital that people draw upon to gain access to resources elsewhere (Massey et al. 1998). Migrant networks tend to decrease the economic, social and psychological costs of migration. Massey therefore conceptualised migration as a diffusion process, in which

[e]xpanding networks cause the costs of movement to fall and the probability of migration to rise; these trends feed off one another, and over time migration spreads outward to encompass all segments of society. This feedback occurs because the networks are created by the act of migration itself.... Once the number of network connections in an origin area reach a critical level, migration becomes self-perpetuating because migration itself creates the social structure to sustain it (Massey 1990: 8).

Thus, besides financial and human capital, social capital needs to be recognised as a third crucial factor determining people's motivation and ability to migrate. Already-settled migrants function as 'bridgeheads' (Bo"cker 1994), reducing the risks and costs of subsequent migration. Therefore, the formation of an established migrant community at one destination will increase the likelihood of subsequent migration to the same place. The cost and risk-reducing role of networks makes migration, once set in motion, notoriously difficult for governments to control.

Contextual Feedback Mechanisms

Linking Theories on the Initiation and Perpetuation of Migration

Network effects can be classified as first-order feedback mechanisms, which are endogenous to the migration process itself. While networks have received most attention, there are other, intermediate, self-sustaining structures largely created or reinforced by migration processes themselves. This includes the 'migration industry', consisting of clusters and networks of travel agents, lawyers, bankers, labour recruiters, brokers, interpreters and housing agents, as well as human smugglers and traffickers, which have an interest in and tend to facilitate the continuation of migration (Castles 2004). Another example of endogenous feedback mechanisms are remittances which can finance the migration of family and community members.

Unfortunately, the focus on networks and, to a limited extent, other endogenous feedback mechanisms has coincided with a limited theorisation of second-order,

contextual feedback mechanisms, which operate more indirectly, that is, through the ways in which migration transforms the broader social, cultural and economic contexts in sending and receiving communities and societies. Examples include the impact of migration on inequality, social stratification, economic growth, entrepreneurship and cultural change.

The crux is that such migration-engendered contextual changes constitute feedback mechanisms which have their own, reciprocal effects on the occurrence of subsequent migration. At any particular time T1, a set of contextual factors at the sending and receiving end, conditioned migration. However, the migration process itself can modify the structural conditions future migrants face at T2 in both sending and receiving contexts. Although contextual effects have received ample attention in the literature on 'migration and development' (for sending contexts) and integration and assimilation (for receiving contexts), these strands have rarely been connected with theories on the perpetuation or 'internal dynamics' of migration, which have largely remained limited to networks. This is unfortunate, because these contextual feedback effects provide the vital conceptual link between theories on the initiation or 'root causes' and theories on the perpetuation of migration.

In order to overcome the artificial separation between theories on the initiation and on the perpetuation of migration, it is necessary to conceptualise migration as

(1) an integral part of contextual change and transformation processes (see Castles 2010, this issue) but also as a process which (2) has its internal, self-sustaining and self-undermining dynamics, and (3) reciprocally affects processes of contextual change. In their turn, (4) such migration-affected contextual changes affect migration patterns. Where (2) refers to direct (endogenous) internal dynamics, (4) refers to the indirect (contextual) internal dynamics of migration processes. These various feedback mechanisms have been depicted in Figure 1.

It is analytically useful to distinguish between meso-and macro-level contextual effects. This paper deliberately focuses on meso-level effects. Meso-level effects operate at the level of the networks, communities and localities which are most relevant for the daily social interaction of migrants. Macro-level factors refer to national and global processes of social, economic, political and cultural change. Obviously, migration can also affect macro-level contexts, for instance through the impact of migration on labour market structures, economic growth, political processes (e.g. the rise of xenophobic political parties, but also the wooing of large migrant groups by political parties, or the extension of voting rights to migrants), migration policies (e.g. large-scale immigration leading to more restrictions) and foreign policy.

It goes without saying that 'exogenous' macro-level factors such as economic development and political freedoms*whether indirectly affected by migration or not*have a major effect of migration, and that the ceteris paribus assumption should therefore never be taken for granted. However, this paper deliberately focuses on the internal dynamics of migration processes and will argue how these meso-level feedback mechanisms are likely to endogenously change the nature and volume of migration over time even if the ceteris paribus assumptions apply.

Figure 1. Conceptual framework of endogenous and contextual feedback mechanisms of migration processes

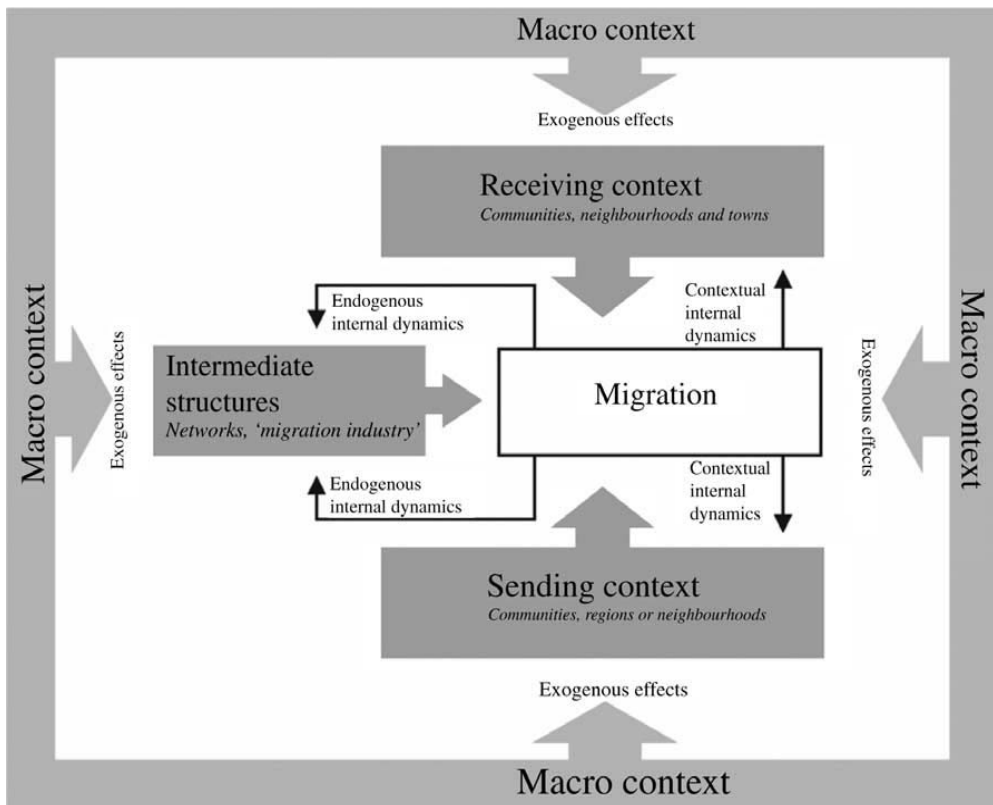


Table 1 summarises the most important meso-level endogenous and contextual feedback mechanisms, which will be discussed in the remainder of this paper. Obviously, the distinction between endogenous and contextual effects is partly artificial, as it is difficult to separate the meso-level diffusion of migration practices from the

Table 1. Examples of endogenous and meso-level contextual feedback mechanisms

Type	Level	Domain		
		<i>Social</i>	<i>Economic</i>	<i>Cultural</i>
Endogenous (First order effects)	Intermediate - (migrant group)	Migrant networks; 'Migration industry'	Remittance-financed migration	Transfers of migration-related ideas and information
Contextual (second order effects)	Origin community	Social stratification and relative deprivation	Income distribution, productivity and employment	Social remittances; culture of migration
	Destination community	Patterns of clustering, integration and assimilation	Demand for migrant labour generated by clusters of migrant businesses	Transnational identities, demand for marriage partners

macro-level context in which such practices spread. Also the distinction between scales of analysis has been criticised by work in geography on the social construction of scale¹ (Marston 2000).¹ Still, such distinctions remain useful, not as rigid categories, but primarily as heuristic devices which help to distinguish between the different feedback mechanisms at play.

Beyond Networks: Migration Systems Theory

Migration systems theory as pioneered by the geographer Mabogunje (1970) has been the earliest known attempt at theorising contextual feedback mechanisms. A migration system can be defined as a set of places linked by flows and counter-flows of people, goods, services and information,² which tend to facilitate further exchange, including migration, between the places. Mabogunje focused on the role of feedback in the form of flows of information and new ideas (such as on the 'good life' and new consumption patterns) in shaping migration systems. Such feedback mechanisms would lead to situations of

[a]lmost organized migratory flows from particular villages to particular cities. In other words, the existence of information in the system encourages greater deviation from the 'most probable or random state'. ... [The] state of a system at any given time is not determined so much by its initial conditions as by the nature of the process, or the system parameters ...since open systems are basically independent of their initial conditions (Mabogunje 1970: 1314).

We can add to this that information is not only instrumental in facilitating further migration, but new ideas and exposure to new life-styles transmitted back by migrants may also increase aspirations to migrate. Migration systems link families and communities over space, resulting in a rather neat geographical structuring and clustering of migration flows. While Mabogunje focused his analysis on rural-urban migration in Africa, migration systems theory can be extended to international migration (Fawcett 1989; Kritiz et al. 1992).

Although migration systems theory goes beyond the usual focus on networks by emphasising the importance of flows of information and ideas, it ignores various other contextual feedback mechanisms through which ongoing migration changes the initial conditions under which migration takes place, and which tend to give migration its own momentum. Table 1 summarises these 'contextual feedback mechanisms' which operate through the impact of migration on (1) inequality and relative deprivation; (2) economies and labour markets; and (3) cultural change. The following sections expand on this.

Inequality, Social Stratification and Cumulative Causation

Massey (1990) reintroduced the concept of cumulative causation originally introduced by Myrdal (1957) in development theory to explain increasing inequalities between

rich and poor regions and countries. Massey applied the concept to explain the continuation of migration, in which cumulative causation stands for 'the idea that migration induces changes in social and economic structures that make additional migration likely' (Massey 1990: 56). Although this comes rather close to Mabogunje's (1970) migration systems theory, Massey identified a number of additional contextual feedback mechanisms operating through the impacts of migration on the income inequality and the economic structure of sending communities.

One of the most important contextual dynamics through which migration can become self-reinforcing is the effect of remittances on income distribution in sending communities. Remittances often increase income inequality in sending communities, which increase relative deprivation and, hence, migration aspirations among non-migrants. In fact, relative deprivation and network effects can easily reinforce each other, if the first effect increases migration aspirations and the second effects lowers the costs and risks of migration. While pioneer migrants are often relatively well-off, such feedback mechanisms can make migration more accessible for poorer groups and lead to a diffusion of the migration experiences within and across communities.

The Vicious Circle of the Migrant Syndrome

The second contextual feedback mechanism operates through the hypothesised negative impact of migration on the economic structures and productivity in migrant sending communities and regions (Massey 1990: 12). Massey hypothesised that large-scale out-migration of the most productive members of the household often leads to less-intensive farming and overall disruption of agrarian organisation. Moreover, migrant households would be more likely to let their lands lie fallow, whereas remittances would be mainly invested in labour-saving techniques, further restricting local opportunities for production and employment. This would then further exacerbate a negative feedback loop connecting migration, agrarian disintegration and further migration. Cumulative causation theory as applied to migration by Massey has strong conceptual parallels with neo-Marxist theories on migration and development, according to which migration undermines the economies of sending communities by depriving them of their human and material resources and increasing their dependence on the outside world (de Haas 2010). The resulting 'development of underdevelopment' (Frank 1966) is seen as fuelling even more out-migration. According to this hypothesis of the 'migrant syndrome' (Reichert 1981), this would create a vicious circle of

migration → more underdevelopment → more migration, and so on.

Social Remittances and Cultures of Migration

Besides the effects of migration on social stratification and relative deprivation, and on the economic structure in sending communities, the framework of migration systems theory can be extended with a third contextual system of feedback

mechanisms: migration-driven forms of cultural change. While the role of reverse flows of information and ideas was already acknowledged by Lee (1966) and Mabogunje (1970), Levitt (1998) coined the term 'social remittances' to describe ideas, behaviours, identities and social capital flowing from receiving to sending communities. Migration and the associated confrontation with other norms and practices, as well as increasing awareness of opportunities and lifestyles elsewhere, can have a profound influence on identity formation, norms and behaviour in migrant-sending communities. If migration becomes strongly associated with social and material success, migrating can become the norm rather than the exception, and staying home can become associated with failure. According to some scholars, this can even give rise to a 'culture of migration' (Massey et al. 1993). Such migration-affected cultural change can further strengthen migration aspirations along established pathways in communities and societies that can become obsessed with migration. It is important to distinguish this aspirations-increasing effect from the more instrumental migration-facilitating role of networks and remittances.

We can hypothesise other ways in which the cultural impacts of migration can encourage more migration. Migration is often held responsible for the disruption of traditional kinship systems and care structures (cf. Hayes 1991; King and Vullnetari 2006). Scholars have also argued that exposure to the wealth and lifestyles of (return) migrants can contribute to changing rural tastes (Lipton 1980: 12). This would increase the demand for imported goods and lower the demand for locally produced goods, further undermining regional economies and increasing the costs of living. The idea is that an increase in perceived needs for consumer goods can also increase the perceived necessity to migrate in order to meet these needs. This exemplifies the close links between migration-affected social, cultural and economic change.

Receiving End Contextual Feedback Mechanisms

Because of huge power and wealth inequalities, the contextual impact of migration on relatively poor sending communities and countries is arguably larger than its contextual impact in relatively wealthy receiving communities and countries (see the paper by Portes 2010 in this issue). However, there are also contextual feedback mechanisms at the receiving end that can sustain migration processes. These will only be elaborated briefly, because they have already been described extensively in the literature on immigrant integration.

First, cumulative causation theory as applied to migration by Massey predicts that migration-driven employment growth at the destination is likely to generate more migration (Massey 1990: 15). Cumulative causation theory hypothesises that migration, because it is a selective process attracting the most talented members of society, contributes to economic growth and labour demand in receiving societies, while having the opposite effects in sending societies, engendering further opportunity disparities, leading to more migration, and so on. Ethnic enclaves might provide labour in ethnic businesses. If they are sufficiently large in number,

immigrant populations might therefore produce network externalities that will attract other migrants (Epstein 2008: 568). More generally, patterns of occupational specialisation (also outside of 'ethnic businesses') and segmentation of labour markets tend to perpetuate the demand for migrant labour within specific economic niches (Castles and Miller 2009; Massey et al. 1993; Piore 1979).

Castles (2010, this issue) argued that the increased use of employment practices such as subcontracting, spurious self-employment, temporary employment, casual work and irregular employment (for instance in domestic service and restaurant work) and the associated growth of informal economies in wealthy countries has fuelled (often irregular) migration. Although the latter is partly the result of shifts in macro-economic and labour market policies, the process of migration itself can further reinforce such trends by accentuating the (ethnic) segmentation of labour markets, and thereby sustaining the demand for (cheap) migrant labour. In addition, if migrants cluster at the destination and maintain strong transnational ties, this can create a demand for marriage partners living in origin countries among migrants and their descendants. This mechanism can fuel migration over several generations (Lievens 1999; MacDonald and MacDonald 1964).

What Existing Theories Cannot Explain

So far, the paper has analysed the various feedback mechanisms which help to understand why migration processes can become self-sustaining. However, there remain two fundamental theoretical weaknesses. First, current theories cannot explain why most initial migration moves do not lead to migration networks and migration system formation. Because empirical studies tend to sample on the dependent (network) variable, they ignore the majority of cases in which initial migration moves do not set in motion self-reinforcing dynamics. Second, their circular logic reveals an inability to conceptualise which migration-undermining feedback mechanisms may counteract migration-facilitating feedback dynamics and which may explain the endogenous decline of established migration systems. Apart from macro-contextual, 'exogenous' factors, migration system decline is usually seen as the result of the gradual weakening of transnational social ties. However, this is logically inconsistent with the idea that network migration would continuously 'refresh' these ties. The following sections will further elaborate this critique and explore which causal feedback links may account for the selective formation and breakdown of migration systems.

The Conflicting Internal Logic of Cumulative Causation

Notwithstanding their strengths, migration systems and cumulative causation theory are also characterised by some logical inconsistencies. They have also been challenged by empirical evidence pointing to the complex, heterogeneous and non-linear character of 'contextual' migration impacts. As with network theory, there is a

problematic circularity in the feedback mechanisms according to which the vicious cycle of impoverishment of 'pauperisation' (and sustained migration) in the periphery and growth at the core goes on ad infinitum (Massey et al. 1998). It seems unrealistic that there are no counter-mechanisms which level off or change the nature of this process over time.

First, there is a logical contradiction between two central arguments of cumulative causation theory. On the one hand, migration is said to increase inequality because migrants come from relatively well-off groups within communities. On the other hand, further impoverishment at the community and regional levels is expected to lead to more migration. This seems logically inconsistent, as the first argument rightly assumes that migration requires a certain threshold of wealth and the second argument assumes a positive linear relation between poverty and migration. This seems an inconsistent analysis of the causes of migration. Conceptualising migration as a (linear) function of impoverishment is problematic because people need a certain minimum of financial, human and social resources in order to migrate (Hatton and Williamson 1998; Skeldon 1997). So, even if the predicted negative development impacts of migration hold (which is also doubtful), below a certain level of impoverishment further migration should decrease, because fewer and fewer people can afford to migrate.

The second problem is that empirical evidence has challenged the hypothesis that migration necessarily undermines development in sending communities. Particularly inspired by the new economics of labour migration (cf. Stark 1991), a growing body of empirical research has indicated that migration and remittances often improve living conditions, reduce poverty and, under favourable conditions, contribute to human and economic development in origin communities and countries (see Agunias 2006; de Haas 2007a; Taylor et al. 1996a, 1996b). Also Massey and his colleagues have challenged the previously dominant view that migration inevitably undermines development and promotes economic dependency (Massey et al. 1998; also Durand et al. 1996).

Thus, the self-reinforcing mechanisms of cumulative causation cannot be taken for granted. The crux is that contextual, 'developmental' impacts of migration can be both positive and negative to varying degrees. If unfavourable economic and political conditions prevail, migration may indeed set in motion negative cumulative causation-like processes. On the other hand, if contextual conditions are favourable or have improved, migrants may reinforce these positive trends, for instance by investing in enterprises in origin countries (de Haas 2009). However, the paradox is that such positive impacts may actually increase migration as long as their contribution to increasing migration capabilities outweighs the effect of declining opportunity differentials with destination countries.

Third, as with network theory, the largely circular character of cumulative causation is also linked to the inability to adequately conceptualise which contextual feedback mechanisms may counteract self-reinforcing contextual feedback mechanisms and

may thus lead to less migration. Besides network saturation, the other main explanation for declining migration provided by Massey (1990: 8) was that

[t]he rate of out-movement ultimately reaches a stage where labor shortages begin to occur and local wages start to rise. ...These developments act to dampen the pressures for additional migration and cause the rate of entry into the migrant work force to decelerate and then to fall off.

This argument seems to be directly drawn from neoclassical migration theory, which expects migration to cause labour to become less scarce at the destination and scarcer at the sending end. Capital is expected to move in the opposite direction. In a perfectly neoclassical world, this process of 'factor price equalisation' (the Heckscher-Ohlin model) will lead to growing convergence between wages at the sending and receiving ends (Massey et al. 1993; Wellisch and Walz 1998), which will eventually remove migration incentives. However, this essentially neoclassical argument is highly problematic since it is incommensurate with cumulative causation theory, which predicts divergence instead of convergence. It seems, therefore, contradictory to combine these two arguments.

Theorising Migration System Decline

It is common to attribute the rise and fall of migrant networks and migration systems to 'exogenous' changes in the macro-level factors that caused migration, such as income and other opportunity differentials, political transformations or migration (and non-migration) policies. For instance, migration tends to decrease sharply if income differentials between sending and receiving countries fall below a critical threshold level, which is sometimes hypothesised at an approximate ratio of 45to1 (de Haas 2007b; Martin and Taylor 1996). Below such threshold levels, the advantages of staying apparently start to outweigh the financial, psychological and social costs of migration. Restrictive migration policies can also increase the costs and risks of migration. This may lead to a change in migration strategies such as increased reliance on family and irregular migration channels instead of official labour migration channels. If marginal increases in externally determined migration costs start to outweigh marginal decreases of migration costs through networks, we can expect a decline of migration or a spatial diversion to other destinations.

This shows the danger of arguing that internal dynamics give migration its own momentum independent of its initial causes, because this would de-link theories on the continuation of migration from theories on the initiation of migration. Although various internal exogenous and contextual dynamics of migration processes tend to increase capabilities and aspirations to migrate, this only applies if the ceteris paribus assumption holds, so it does not render its fundamental macro-causes irrelevant at all. However, the crucial argument that this paper tries to make is*apart from the preponderant role of macro-level contextual change*that there are also migration-undermining internal feedback mechanisms which counteract the much-emphasised

migration-facilitating dynamics and may weaken migration systems over time. It is crucial to conceptualise such migration-undermining dynamics in order to understand why it is that migrants are not only stereotypical 'bridgeheads' facilitating subsequent migration, but may also be or become restrictive 'gatekeepers' (Bo"cker 1994; Collyer 2005), who are hesitant or unwilling to assist prospective migrants. This is further discussed below.

Migration-Undermining Internal Dynamics

Introducing Non-Linearity: Migration as a Diffusion Process

Commonsensical interpretations of network theory are unrealistic because, according to their logic, a whole community should end up at the destination. In order to explain non-linearities in network growth, Massey (1990), Haug (2008) and others have instead conceptualised migration as a diffusion process which follows a classical S-shaped curve, while the migration rates follow the shape of a bell curve (see Figure 2). In his hypothesis of the mobility transition, Zelinsky (1971) also conceptualised the occurrence of various forms of migration as a process diffusing outward through space and time by linking modernisation processes and their associated demographic transitions to patterned regularities in the overall growth of personal mobility (Zelinsky 1971: 2202).

The application of diffusion theory to the study of migrant network dynamics seems useful to explain why migration rates between particular places, regions and countries are seldom constant but rather tend to level off and decline after an initial period of fast growth. Everett Rogers (1962), the founder of diffusion theory, proposed that adopters of any new innovation or idea can be sequentially categorised as innovators, early adopters, early majority, late majority, and laggards.

Applied to migration, pioneer migrants fit within the first category of innovators and, perhaps, early adopters. Evidence suggests that such early migrants are often from relatively well-off households, as early migration often entails high costs and risks. Networks diminish the costs and risks of migration. Once these costs and risks

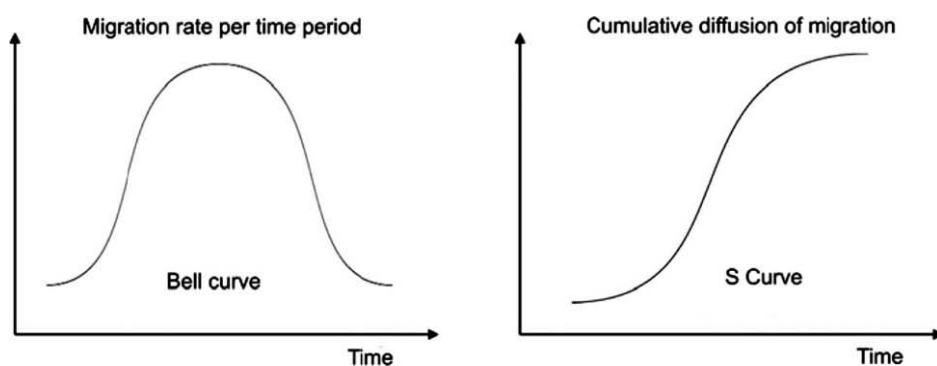


Figure 2. Hypothesised migration diffusion (Bell and S curves)

decrease below a critical threshold level (equal to, for instance, median or mean 'affordability' of migration), an increasing proportion of the population will be able to migrate, leading to an exponential growth of migration rates.

A more contentious point is to ask when saturation occurs, and to what extent it is realistic to expect that migration will slow down. Haug (2008) hypothesised that, with each new migrant, social capital declines at the place of origin, resulting in an attendant drop in the potential loss of social capital at the place of origin. According to this rather mechanistic line of reasoning, however, there would not be a built-in tendency for network migration to slow down beyond a certain point, and, *ceteris paribus*, we can expect the whole community to end up at the destination.

Yet empirical evidence suggests that, generally, only a minority of community members actually migrate. This can only be explained if migration is conceived as part of broader multi-local livelihood strategies pursued by households and families to spread income risks and to overcome local market constraints*such as has been proposed by the new economics of labour migration*rather than as an individual strategy for utility maximisation, as assumed by neoclassical migration theory. If diversification of income risks, improvement of well-being of family members and the generation of capital (remittances) to invest in sending communities are an important rationale behind migration, it is often not in the interest of households that all members migrate, but rather to have one or several 'best suited' (generally young) household members migrating.

Human and social capital theories provide relatively straightforward explanations of why migrants tend to be young, as they have greater expected lifetime returns on their human capital and they have invested less in social capital at the origin, and therefore have literally less to lose. From this, we can hypothesise that saturation occurs when most households willing to migrate have done so. Any further declines in costs and risks through network effects will only allow a small number of the remaining, most deprived members*the late adopters or 'laggards'*to migrate.

Put differently, the marginal returns of increasing network connections on the odds of migrating diminish as migrant communities and network connections grow. These marginal positive returns are large and growing in earlier stages of migration, when the cost-and risk-diminishing effects of the network lower the absolute threshold levels of minimum required wealth so that migration becomes possible for large sections of sending communities. Such returns will diminish when most households have access to migration and network connections have become less scarce. However, we can expect the right-tail decline in migration rates to be less steep and much more protracted than suggested by Figure 2, because the absolute threshold levels of required wealth to enable migration will, *ceteris paribus*, have declined through network effects. In addition, other than technical innovations, migration is a social phenomenon that tends to reproduce itself over the generations, so it would be naïve to assume an automatic 'end' of migration. Combined with network theory and household approaches, diffusion theory seems a useful conceptual tool to understand sequences of rising and falling migration rates between specific places. Saturation is

the only endogenous mechanism identified by conventional network theory to explain declining migration over time.

However, migration diffusion theory has a number of conceptual pitfalls. First, the theory seems to implicitly assume that migration is an anomalous, new behaviour, which is effectively based on the 'myth of the immobile peasant' (Skeldon 1997: 78). So, as much as there was not a 'beginning' of migration, we should not assume an 'end' of migration at the right-hand-side of the bell curve. It is therefore also important to emphasise that theories on the continuation of migration are essentially meso-level theories which can be applied to explain the evolution of particular migration systems linking specific places and regions. They do not pertain to migration generally.

Another pitfall would be to interpret diffusion theory too rigidly, resulting in a dogmatic, evolutionary view of the migration stages which communities 'have to' go through. Empirical realities tend to depart from this ideal type, in particular because macro-contextual conditions can change and the *ceteris paribus* assumptions therefore often do not apply.

A more fundamental problem is the assumption that 'over time migration spreads outward to encompass all segments of society' (Massey 1990: 8, emphasis by author). From empirical studies, we know that this is often not the case because communities and societies are often socially stratified, and group boundaries can impede the diffusion of the migration experience. Instead of spreading to all segments of society, migration then becomes a socially stratified process, in which particular families, ethnic groups or classes participate in and monopolise specific forms of migration. This is likely to coincide with the exclusion of other social groups from migration.

This reveals the importance of incorporating structure and power in the analysis of migration processes by shifting away from neoclassical and other functionalist interpretations of network theory which somehow assume a 'level playing field'. It compels us to embark upon a more critical discussion of the fundamentally mixed blessings of social capital in migration processes.

The Downsides of Migratory Social Capital

Social capital, in the form of strong kinship and social bonds, facilitates the migration of group members. However, the flipside of the coin is that such strong group bonds tend to exclude outsiders from access to migration. Particularly in relatively poor communities where social organisation and trust are mainly based on kinship ties and 'bonding' social capital (I discuss this further on), these bonds are a prime channel for gaining access to international migration, either through marriage, assistance with securing visas, financing irregular migration, finding work and housing, and so on. Often migrants, and their children, tend to prefer to marry partners within their own extended family or their own ethnic lineage (cf. de Haas 2008).

Therefore, kinship-or class-based access to migrant networks also tends to coincide with kinship-or class-based inequality in access to such networks. This also

explains why the supposed 'diffusion' of migration within communities can remain largely limited to particular ethnic groups, families or classes which monopolise access to international migration. This points to the 'downside of social capital', a concept elaborated by Portes (1998). In an attempt to criticise uncritical and fashionable applications which celebrate social capital as a 'key to success and development', Portes (1998) argued that social capital also has at least four possible negative implications:

1. *Restricted access to opportunities through exclusion*: The same strong ties that bring benefits to members of a group often enable the group to exclude outsiders.
2. *Excessive claims on group members*: Tight social networks and obligations may undermine individual economic initiatives through pressing social obligations and excessive claims on such successful individuals to support family and community members.
3. *Restrictions on individual freedom*: Community or group membership creates demands for conformity, which can be asphyxiating to the individual spirit and to personal freedoms.
4. *Downward levelling norms*: Particularly if group solidarity is cemented by a common experience of adversity and discrimination by mainstream society, individual success stories undermine group cohesion 'because the latter is precisely grounded in the alleged impossibility of such occurrences' (Portes 1998: 17). This may lead to the emergence of downward levelling norms that keep members of a group in place and force the more ambitious to escape from it.

The following sections will show that incorporation of negative forms of social capital in our conceptual framework will enable us to radically improve insights into the internal dynamics that may impede or gradually undermine self-perpetuating internal migration dynamics. It will particularly help us to understand phenomena such as pioneer migration, the limited diffusion of migration across group boundaries, and the reasons why migrants often act as 'gatekeepers' rather than 'bridgeheads'.

The Exclusionary Dynamics of Migrant Networks

Social capital in the form of migrant networks tends to be seen as an unmixed blessing facilitating more migration. However, if access to migration networks is based on ties of kinship or ethnicity, this implies that, although current migrants may indeed act as 'bridgeheads' for group members, they may simultaneously act as 'gatekeepers' for outsiders. Because societies tend to be socially and ethnically stratified, migration often does not diffuse throughout entire societies, and while it may enable migration from group members, such dynamics tend to exclude nonmembers. This exemplifies that networks are a double-edged sword which includes some groups, but therefore inevitably excludes others. Or, to use the words of Portes

(1998: 18), 'sociability cuts both ways'. We can hypothesise that the more closed groups are and the higher the migration costs are, the higher the level of outsider exclusion will be.

It is also crucial to decompose social capital into (1) the social relationship itself, and (2) the amount and quality of resources that can be accessed through such relationships. This distinction was essential in Bourdieu's original definition of social capital (see above), but these two elements have unfortunately been confused in much of the later literature (cf. Coleman 1988; Putnam 2000). Portes argued that the inherent danger of such analytical fuzziness is tautological reasoning since, after all, 'defining social capital as equivalent with the resources thus obtained is tantamount to saying that the successful succeed' (Portes 1998: 5, emphasis added). The implication is that strong social networks only facilitate migration if network members have access to resources facilitating such migration.

It is therefore important to stress that networks as such are neither a necessary nor a sufficient condition for migration to occur. Bourdieu (1985: 241) emphasised that the different forms of capital are fungible. This implies that economic, human, cultural and social capital can be converted into each other.³ Social capital in the form of migrant networks can be a useful resource enabling people to migrate and, hence, potentially gain access to other (economic, human and cultural) capital. However, strong social connections as such do not enable migration. Networks do not automatically lead to more migration, because they require that migrants are both (1) able to mobilise the necessary resources (or capitals) to facilitate migration, and (2) willing to help prospective migrants because of moral obligations, altruism, self-interest or a combination thereof. For instance, impoverished and marginalised migrants might simply be unable to deliver 'help' because they lack the resources to do so, while assimilated migrants may be capable but not willing to provide migration assistance. Thus, economically successful ('integrated') migrants who have retained strong transnational ties seem more effective migration facilitators.

It is also crucial to observe that migration is not necessarily achieved through social capital (networks), but can also be achieved through other forms of capital. We can therefore hypothesise that relatively poor, low-skilled migrants are generally more dependent on social capital in the form of networks in order to migrate than relatively wealthy, high-skilled migrants. People possessing high levels of economic, human and cultural capital will be better able to migrate without the help of others, for instance through obtaining work visas. Their relatively high dependence on social capital to facilitate migration partly helps to explain why low-skilled migrants tend to cluster in specific towns and neighbourhoods⁴ as opposed to the more individualised and spatially more diffuse settlement patterns of high-skilled, wealthy migrants who are able to migrate more independently.

Migration Undermining Contextual Dynamics

There are also a number of contextual feedback mechanisms which may undermine migration in the medium to long term. Epstein (2008) hypothesised two opposing effects resulting from the increase of the size of networks. Initially, both new migrants and settled migrants often benefit from network growth through mutual support and economies of scale involved in growing migrant clusters, for instance through the growth of 'ethnic business' and the establishment of schools. However, these advantages tend to decrease over time, and at the point that the marginal costs of having more immigrants start to exceed the benefits for the already settled migrants. At a certain point, diseconomies of scale through increasing competition for jobs and pressure on wages might decrease the willingness and/or ability of settled migrants to provide migration assistance. Then the existing migrants become less likely to wish more migrants to join them (Epstein 2008: 573). There is some empirical evidence confirming that the probability of an individual migrating to a particular destination has an inverse U-shape relationship, with regard to the number of immigrants already in the destination country (Bauer et al. 2000; Epstein 2008: 573).

If the number of immigrants increases, there is potentially more competition for jobs, which potentially lowers immigrants' wages. This may eventually cause the attractiveness of a destination to decrease (Epstein 2008). In particular, if immigration is subject to adverse selection (often as a consequence of threshold-lowering network effects), early, high-productive immigrants have fewer incentives to assist low-productive community members or co-nationals to immigrate (Epstein 2008; Stark 1991). In addition, once an immigrant population reaches a particular size and maturity, and second and third generations start to come of age, an individualistic culture can take hold and relations can become more impersonal, explaining why 'the arrival of someone from "back home"' may not evoke the same feeling of responsibility and benevolence' (Epstein 2008: 580).

Also at the sending end, several social, cultural and economic feedback mechanisms can contribute to the long-term breakdown of migration systems. First, network-driven migration diffusion across communities can also have a non-linear impact on income inequality, relative deprivation and migration aspirations. *Ceteris paribus*, network effects and the hypothesised diffusion of migration can decrease the selectivity of migration over time and, hence, can dampen or even reverse the initial inequality (and, hence, relative deprivation) effect of migration (cf. Jones 1998; McKenzie and Rapoport 2007). Such processes can eventually also attenuate migration aspirations and propensities. In addition, diffusion of the international migration experience throughout communities may result in a declining prestige attached to international labour migration. This may even lead to more negative values attached to migration, as a last resort for people who cannot make it at home.

Other migration-undermining contextual feedback mechanisms are linked to the desire among resident, remittance-receiving migrant families to avoid negative social capital. If international migrants and the household they left behind are continuously

confronted by excessive claims from more family and community members for financial and migration assistance, this can eventually cause a social and also spatial distancing from family and community members. In rural Morocco, for instance, migration-related tensions between the migrants' wives and their families-in-law over remittance use have accelerated the nucleation of extended families and the concomitant construction of new houses for migrants' nuclear families in other places than the native village (de Haas 2003; Hajjarabi 1995).

Such socio-spatial 'lifting out' of nuclear families can be interpreted as an attempt to escape from social pressures to 'help' excessive claims by family and community members, the second form of negative social capital identified by Portes, who emphasised that 'cosy intergroup relations of the kind found in close-knit communities can give rise to a gigantic free-riding problem' (Portes 1998: 16). Non-migrants can put strong moral pressure on migrants to help them and share their wealth. 'Good' migrants are expected to share their wealth with poorer community members or to help them with establishing businesses or migrating (de Haas 2003). Those not acting according to norms of 'shared poverty' (cf. Geertz 1963) risk being criticised. This can eventually encourage the relocation of migrant households and the breakdown of networks linking migrants and non-migrants.

The Formation and Decline of Migration Systems

Network dynamics are not immediately set in motion after the departure of the first migrants. After all, if these self-reinforcing processes apply from the beginning, all initial migration moves would evolve into migration systems. It has been argued that the number of migrants and network connections first has to reach a certain critical level (Massey 1990: 8) before effects of clustering and economies of scale start to give migration processes their own momentum. However, the existence and level of such thresholds has neither been satisfactorily theorised nor empirically identified. This illustrates the need to improve insights into the processes at play before migration gains its self-reinforcing internal dynamics.

This requires synthesising the various insights and hypotheses developed so far into a temporal conceptual framework. To this purpose, this section proposes an ideal-typical framework of the various processes and relationships which explain the differentiated rise and fall of migration systems across space and time. It is important to emphasise that this is an ideal-type, which does not presume universal applicability or irreversibility, but is, rather, a heuristic device to identify the various migration-facilitating and migration-undermining endogenous and contextual feedback mechanisms that are typically at play during the various trajectories and stages of migration system formation and decline. This framework, which is depicted in Figure 3, will be based on the notion of migration as a spatio-temporal diffusion process, but will be amended and extended with various theoretical insights discussed above. Because of significant data gaps, this exercise is primarily meant to provide a set

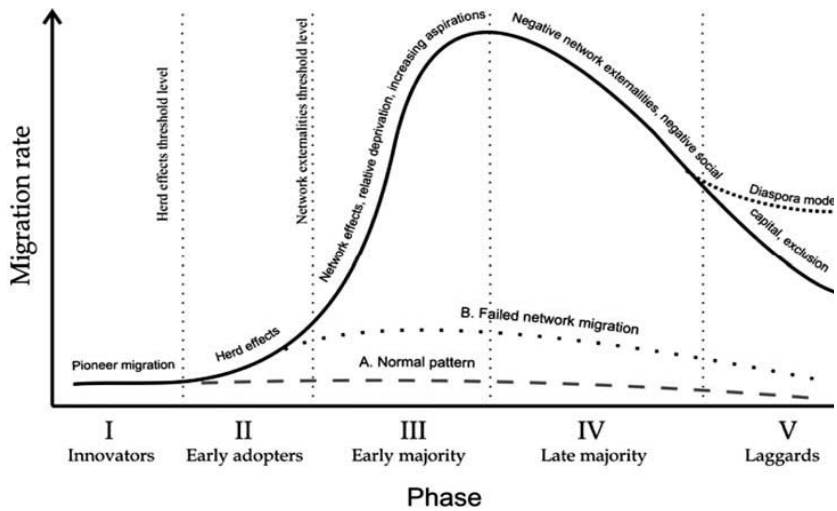


Figure 3. Ideal-typical trajectories of migration system formation and decline

of hypotheses, which need further verification, modification and refinement through empirical research.

Migration as Innovation: Pioneer Migration

How does migration start? While the macro-contextual factors which tend to condition migration (such as opportunity differentials, policies, infrastructure, or violent conflict) are well-documented, the factors which actually trigger initial migration moves and the mechanisms at play during the migration acceleration phase that precede network formation are less-well known. Under different guises, the migration literature has made a distinction between pioneer (active, innovating) and chain (passive, conservative) migrants (Hägerstrand 1957; Petersen 1958). Pioneer migrants are generally recognised to be relatively well-off, risk-prone and entrepreneurial community members (MacDonald and MacDonald 1964; Vecoli 1964). This also implies that they are likely to be rather non-conformist, as the adoption of new ideas and behaviour*such as migrating to new destinations*can imply violating social norms. This leads to the hypothesis that negative social capital can under certain circumstances be a cause of pioneer migration. A high level of social control restricts personal freedoms, 'which is the reason the young and more independent minded have always left' (Portes 1998: 16). In particular, the second (excessive claims on group members) and third forms (restrictions on individual freedom) of negative social capital can explain why non-conformist, innovating and entrepreneurial community members may have a desire to escape from their community through migrating.

This reveals the danger of automatically conceiving migration as an act of group solidarity or as part of household livelihood strategies. Although household

approaches constitute a welcome departure from neoclassical, individualistic approaches, they entail the danger of reifying the household or family as a harmonious unit with a clear will, strategy and aims. This leaves no place for dissent, conflict and the desire to escape. In particular, pioneer migration can under certain circumstances be motivated by the desire to escape from asphyxiating and oppressive kinship and community bonds. This can also help to explain why not all migrants maintain intensive social and financial ties, although once established at the destination, pioneer migrants might renew such bonds at later stages of the life cycle (cf. Stockdale 2002).

Early Adopters: Chain Migration and Herd Effects

Pioneer migrants may end up settling in a range of destinations while others return, but only a minority of such initial moves will eventually result in network migration. If pioneer migrants settle at the destination, limited chain migration⁶ of family members or close friends might follow, after which migration largely ceases. This most common, normal scenario of countless initial migration moves that never result in take-off network migration is represented by line A in Figure 3.

The crucial question remains: under which conditions do initial moves by pioneer migrants result in rapidly expanding network migration and the formation of migration systems, and under which conditions does this not happen? To understand the growth and clustering of migration to particular destinations before the hypothesised network threshold level is reached, it is useful to draw on Epstein's (2008) distinction between herd and network effects. Epstein (2002, 2008) argued that those without information about destinations will migrate to where most initial migrants have gone. It is a rational choice for new migrants possessing no or limited information to follow previous migrants on the supposition that they enjoyed information that they did not have and that so many other people cannot be wrong (Epstein 2008: 569).

Such herd effects can explain how migration can become self-reinforcing before the hypothesised network threshold level is reached. This effect needs to be distinguished from network effects. As more individuals migrate, unobserved conditions at the destination are reduced (Radu 2008), leading to an increasing clustering around a few specific destinations. Theoretically, even tiny initial leads in the number of migrants at a particular destination will be magnified many times through the increased clustering of migration through herd effects. The corollary of such increasing spatial concentration means that most migration and herd behaviour to other destinations will remain limited and will be increasingly siphoned off by migration to dominant destinations and that migration will die off below the migration take-off threshold level. This latter hypothesised pattern of 'failed migration systems' is represented by line B in Figure 3.

Take-Off Migration: Mutually Reinforcing Network Externalities and Contextual Impacts

Only a few initial clusters will reach a certain critical threshold level at which endogenous and contextual feedback mechanisms start to make the process self-reinforcing. Although we hypothesise the existence of such threshold levels, their existence and levels still need to be identified empirically.

A recent household survey in rural Mexico revealed that, once migration is well established in a community, family networks become less important and community networks become more important, allowing those initially least favoured to also participate in migration (Winters et al. 2001). While this is consistent with the diffusion hypothesis, it also points to the importance of distinguishing (family) chain and (community) network migration, and, in the same vein, to distinguish the role of weaker and stronger social ties in migration processes (Granovetter 1973; see below).

Networks not only facilitate migration but also encourage settlement and adjustment to a new location by providing migrants with access to local resources. Positive network externalities arise when the number of migrants is sufficiently large to provide accommodation, work and other economic assistance, and reduce the stress of cultural adaptation (Epstein 2008). Economies of scale created around immigrant clusters make the destination more attractive for new migrants. At the same time, 'ethnic' businesses and niches in the mainstream economy can create a specific demand for migrant labour. This makes an increasing number of migrants gravitate to that particular destination, reinforcing such feedback effects.

At the sending end, several feedback effects tend to increase aspirations and capabilities to migrate. First, networks and remittances facilitate the financing of the migration of other family and community members. Second, the initially inequality-increasing effects of remittances are likely to increase feelings of relative deprivation among non-migrants and, hence, their aspirations to migrate. Social remittances are likely to reinforce these processes and can even lead to a shift in preferences or a 'culture of migration', in which increasing prestige is attached to migration. Third, remittance-driven increases in local consumption and investment may stimulate local economic growth and increase employment and income through multiplier effects. This will enable an increasing share of the population to reach the threshold level of wealth at which they can assume the costs and risks of migration. Conjointly with threshold-lowering network effects, such multiplier effects will increase people's capabilities to migrate.

To summarise, internal dynamics at the sending and receiving end tend to reinforce each other during this take-off phase by lowering migration threshold levels through cost-and risk-reducing network effects; and increasing individual capabilities and aspirations to migrate. This can explain increasing migration even if other opportunity differentials between destination and origin decrease. We can hypothesise that, as long as people's aspirations increase faster than increases in local

opportunities, migration aspirations will continue to increase, while internal dynamics of migration processes can increase people's capability to migrate.

Relative Social Capital Dependence and the Selective Formation of Migration Systems

A certain level of spatial clustering at the destination is generally a prerequisite to generate the threshold externalities necessary to make the transfer from chain to network migration. This happens when a sufficient number of migrants have started to independently establish ties so as to create a sense of community at the destination. On the basis of migratory social capital theory outlined above, we can hypothesise that such self-reinforcing dynamics are more likely to occur among relatively poor and low-skilled migrants who face relatively high material, social and psychological migration costs, and who are consequently more dependent on social capital for migration and, hence, also more likely to cluster at the destination. Because high-skilled migrants are generally relatively less dependent on social capital for migrating, their settlement patterns are, *ceteris paribus*, more diffuse and they are likely to assimilate more rapidly for this and various other reasons (Choldin 1973; Epstein 2008).

But why and how do only some family migration chains eventually evolve into community-wide migration networks and full-blown migration systems? Because of the pivotal role of information in migration in the pre-network stage, it is useful to consider Granovetter's (1973) hypothesis of the 'strength of weak ties'. By stressing the cohesive power of weak ties, Granovetter criticised conventional social network models for confining their applicability to small, well-defined groups. He argued that the degree of overlap of two individuals' networks and, hence, information, correlates positively with the strength of their ties to one another. Diffusion of new information, opportunities and behaviours are therefore more likely to enter groups through 'no strong ties' or 'bridges', which provide the links between primary groups (Granovetter 1973: 1364).

Later interpretations of Granovetter's initial hypothesis have evolved into the now conventional distinction between 'bonding' and 'bridging' social capital (Putnam 2000). While bonding social capital refers to the value of networks for homogeneous groups, bridging social capital is generally believed to increase community cohesion and the society-wide spread of information and innovative ideas. So, while Portes (1998) pointed out that strong intra-community ties tend to exclude outsiders, we may add that strong 'bonding' and weak 'bridging' social capital tends to exclude group members from new information and ideas: the fifth downside of social capital.

Applied to migration, this means that information on new destinations is more likely to spread through relatively weak connections than through close contacts. From this, we can hypothesise that the more closed and isolated social groups are (i.e. groups with strong bonding and weak bridging social capital), the lower their participation in migration will be. Groups which combine strong bonding with strong bridging capital are more likely to migrate to new destinations because of their access

to information, but they are more likely to concentrate in particular enclaves at the destination. This will create externalities that will be of great benefit to group members.

In particular, this seems to apply to tightly knit ethnic and religious groups specialising in trade, such as the Mourid Sufi brotherhood in Senegal, who have developed vibrant international trading and migration networks (cf. Stoller 1996). Through trading, they tend to be well informed and economically relatively successful, but at the same time they have a strong group identity and tend to fiercely resist assimilation. If such transnational networks linking migrants from the same (imagined or real) motherland transversally across several destinations are sustained over generations, migrant groups may become 'diasporic' (as defined by Cohen 1997). Yet, this will also coincide with the exclusion of outsiders and, hence, a lower degree of diffusion beyond group boundaries.

If we apply Granovetter's (1973) hypothesis of the 'strength of weak ties' and Portes' (1998) 'downside of social capital' to the theory of migration system formation, we can therefore hypothesise that a certain optimal balance between strong intra-community ties and 'weak ties' is a necessary condition for migration to gain its own momentum. Large-scale migration diffusion through network effects seems most likely to occur among relatively poor, low-skilled migrant groups with a 'moderate' level of group identity, cohesion and 'strong ties', which should be strong enough to guarantee clustering and prevent rapid assimilation, but also loose enough so that group norms do not prevent the establishment of 'weak ties'. This seems to apply to many rural communities in relatively poor but rapidly modernising and transforming societies.

This enables us to link cultural and social change in explaining how modernisation-affected change in the form of loosening group ties and growing connectedness to the outside world can spur migration through exposure to new information and ideas through channels such as education, media and networks. It seems no coincidence that international migration is often high in rural areas in moderately developed countries (such as Mexico, Turkey and Morocco). This is not only because in these areas relatively many people have the capabilities to migrate because of modest levels of wealth, well-developed transport and communication infrastructure and the relative proximity of destination countries; but also because modernising cultural influences are transforming local culture and loosening community ties, leading to increasing migration aspirations. Communities which do not fiercely resist cultural change, and whose members are rapidly expanding their imaginative and geographical horizons, therefore seem also more migration-prone.

Stagnation and Migration Systems Decline

Once migration networks and systems are established, several mutually reinforcing feedback mechanisms tend to give migration processes their own momentum. However, the core of our argument is that these migration-facilitating internal

Table 2. Hypothesised effects of migrants' group cohesion, human capital and migration costs on internal migration dynamics

		Networks	
		<i>Many bonding ties, low skilled</i>	<i>Many bridging ties, high skilled</i>
Migration costs (distance, infrastructure, policies)	<i>Low</i>	Initially strong clustering, after which intra-community diffusion occurs through 'herd' and 'network' effects, transfer of family to community networks; declining relevance of networks over time	Networks less important, low spatial clustering, spatially diffuse flows, rapid diffusion of migration through spread of information
	<i>High</i>	Highly clustered flows perpetuated over long time periods, limited diffusion, highly facilitating for members, but highly and increasingly exclusionary for non-members.	Importance of networks at family and friends level (chain migration), rapidly declining over time

dynamics are counteracted and can give way to a range of feedback dynamics that may undermine migrant networks and migration systems over time. First, migration networks do not generally expand across entire communities and societies, particularly if strong bonding social capital coincides with a high degree of outsider exclusion. Second, once networks reach a certain size and maturity, marginal positive externalities often start to decrease and diseconomies of scale might occur through increasing competition for jobs and other resources (Bauer et al. 2000; Epstein 2008). Also on the sending side, negative social capital in the form of social pressure on migrants to share wealth and provide migration assistance can lead to increasing social and spatial distancing and may transform migrants from 'bridgeheads' into restrictive 'gatekeepers'. At the same time, while the initial inequality, relative deprivation and income-increasing contextual feedback mechanisms tend to increase people's capabilities and aspirations to migrate, such effects can be dampened or even reversed at later stages of migration diffusion processes when migration selectivity, remittance-propelled inequality and the social prestige attached to migration may decrease and eventually become negative.

Long-term network and migration system contraction is particularly likely to happen if: (1) migrant communities start to experience socio-economic mobility, usually coinciding with increasing assimilation, geographical dispersal and decreasing clustering; (2) if severe legal migration restrictions increase costs of migration and negative social capital in the form of the claims put upon settled migrants; or if (3) opportunity gaps with origin and destination countries are dramatically reduced. Under the first and/or second conditions, migration flows occurring from the origin will not necessarily decrease but are more likely to partially or largely shift to new destinations. Collyer's (2005) analysis of the spatial reorientation of recent Algerian asylum-seeker migration from France to new destinations such as the UK is a case in

point. Because family members of asylum-seekers started to avoid claims on their assistance, migrants actively started to seek new, more attractive destinations, thereby mainly drawing on 'weak' links. This is how new migration clusters might start to evolve.

The declining, right-hand tail of Figure 3 is not inevitable, as is testified by migration systems which survive several generations and even centuries. In particular, tightly knit ethnic and religious groups might sustain transnational relations and develop transnational identities which can become truly 'diasporic' (cf. Cohen 1997). Several studies have indicated that integration does not necessarily go along with declining transnational ties (Guarnizo et al. 2003; Snel et al. 2006). In particular, migrant groups that combine economic integration with limited cultural assimilation and maintenance of strong group identities are likely to be more willing and capable to provide migration assistance, and therefore seem to represent a high potential for network migration.

Conclusion

This paper has argued that existing theories on the internal dynamics of migration processes excel in explaining the expansion of already-established migrant networks and migration systems, but generally fail to explain their initial, selective creation, different trajectories and subsequent breakdown. First, through their focus on networks, theories have largely obscured several migration-facilitating feedback mechanisms operating through migration-affected changes in the sending and receiving contexts. Second, current theories are strikingly unable to explain why these effects often do not occur. Third, the central argument of network theories is largely circular, according to which migration goes on ad infinitum. They give surprisingly little insight into the migration-undermining feedback mechanisms which can lead to the breakdown of migration systems over time.

Based on a dynamic perspective of migration as a diffusion process, this paper aimed to achieve an improved understanding of migration system dynamics by elaborating a set of interrelated hypotheses on the various migration-facilitating and migration-undermining feedback mechanisms at play at the various trajectories and stages of migration system formation and decline. The paper made a distinction between endogenous and contextual feedback mechanisms and outlined the various ways in which these internal dynamics can give migration processes their own momentum. The analysis has shown that extending the usual focus on endogenous feedback mechanisms operating through networks with contextual feedback mechanisms yields a more comprehensive account of why migration often leads to more migration.

However, the core of the argument is that these internal dynamics tend to operate in a fundamentally non-linear way. While they tend to be self-reinforcing at early stages of migration system formation, such positive dynamics can be dampened or even reversed at later stages. Initially, migration and remittances-fuelled increases in income and employment in sending communities tend to enhance migration capabilities, while

concomitant increases in inequality, relative deprivation and the social prestige attached to migration tend to increase people's aspirations to migrate. However, in the longer run, migration diffusion can lead to decreasing migration selectivity, inequality and the social prestige attached to migration. In the same vein, while positive social and economic network externalities derived from the clustering of migrants are likely to increase quickly during early build-up phases of migrant communities, these are likely to decrease and can even become negative at later stages through diseconomies of scale and increased competition for jobs, remittances and other resources.

While the concept of negative social capital linked to exclusionary mechanisms of group formation help to explain the limited diffusion of migration across communities and societies, the paper also reveals our lack of understanding of why only a minority of initial migration moves result in the creation of migrant networks and full-blown migration systems. This highlights the need to improve theories on the processes preceding the moment that migrant communities reach the critical threshold value at which migration processes become self-reinforcing. The paper therefore elaborated a set of hypotheses on the mechanisms that might be at play during these early phases of migration processes. On the one hand, it advanced the idea that some forms of pioneer migration can be interpreted as innovative behaviour by non-conformist community members escaping negative social capital such as the lack of personal freedoms. In order to explain why only some initial migratory moves by pioneer migrants result in large-scale group migration through networks, the analysis has drawn on Epstein's (2008) distinction between 'herd' and network effects to explain the fact that migrants tend to quickly gravitate around a small number of destinations.

The paper also argued that major achievements in migration theory can be achieved by applying concepts and theories developed in general social theory. In particular, concepts derived from the critical social capital literature as pioneered by Portes (1998) can be successfully applied to develop a more nuanced view of the positive and negative roles of social capital in migration processes. Such a perspective helps to counterbalance one-sided positive views on the role of social capital in network migration and migration systems formation. This can fill a crucial gap in our understanding of the factors that might contribute to the breakdown of migration networks and migration systems. Closed networks may facilitate the migration of group members, but also tend to be exclusionary for outsiders and may therefore effectively impede the diffusion of migration within and across communities.

In addition, negative social capital in the form of excessive claims by non-migrant community members and strong moral pressure to support them seems to play an important role in the breakdown of migration systems. Apart from external macro-level factors such as migration policies, economic development and labour market conditions, this helps to explain why settled migrants and their descendants often evolve from being 'bridgeheads' to becoming 'gatekeepers'. This highlights the need for a more critical discussion of the fundamentally mixed blessings of social capital in migration processes.

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Notes

- [1] I would like to thank Michael Collyer for drawing my attention to this issue.
- [2] It is also possible to distinguish migration systems at the macro, country-to-country level. However, such an analysis would go beyond the aim of this paper, which is focused on the micro and, particularly, meso levels.
- [3] Bourdieu (1979; 1985) did not use the term human capital, but this concept seems to be more or less included in his definition of cultural capital (see also Portes 1998).
- [4] It goes without saying that housing and other public policies have a major influence on settlement patterns too. In addition, the fact that low-skilled migrants living in one neighbourhood often come from the same village or region can also be the consequence of deliberate recruitment policies by employers rather than a consequence of a spontaneously developed chain migration.
- [5] I observed this during fieldwork I conducted in 2005 in Emirdag, a rural area in Turkey, where youth now increasingly aimed to study and build their futures in big Turkish cities instead of abroad. Labour migration to Europe was increasingly seen as behaviour typical for 'losers'. There seems to be a link between this shift in orientations and the high economic growth Turkey has experienced after 1990.
- [6] I define chain migration as the migration of direct kin and family members of pioneer migrants to distinguish it from network migration. Migration chains refer to direct, vertical family ties, whereas networks suppose community-level transversal connections between migratory family chains at the community level at both the origin and the destination.

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