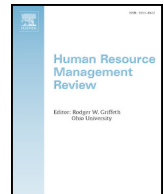




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## Incorporating the macro view in global talent management

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## ABSTRACT

We argue that the present scope of global talent management (GTM) is limited by its focus upon individuals and organizations, that leaves country effects and influences, as witnessed in the form of talent mobility, and respective governments' direct involvement in attracting and developing national talent, unaddressed. We present a conceptual framework for macro global talent management (MGTM), which incorporates a macro view and supports interdisciplinary research. The framework draws our attention to the macro context in which GTM occurs as well as illuminates its multiple consequences traversing levels of analysis. It also captures the essence of complexities associated with managing talent globally. We offer directions for future research and discuss implications for managers and policy makers. We conclude with some contributions, limitations and conclusions.

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The origins of global talent management (GTM) can be traced back to the 1800s and to the fields of arts/entertainment management, sports management literatures, and early education (Tarique & Schuler, 2010). Interest in talent management in the business context came in the 1990s by a group of McKinsey consultants coined the phrase, 'war for talent' in the late 1990s to emphasize the critical importance of employees to the success of top performing companies (Michaels, Hanfield-Jones, & Axelford, 2001). This led to a flurry of interest in talent management research and practice within organizations (e.g., Cappelli & Keller, 2014; Collings, 2014; Farndale, Pai, Sparrow, & Scullion, 2014; Minbaeva & Collings, 2013), including many reports that indicate that business leaders realize the importance of talent management, and spend a significant portion of their time and resources in planning and implementing talent management activities (see for example, Boudreau, 2010; Economist Intelligence Unit, 2011; Heidrick & Struggles, 2012; Strack, Baier, Caye, Zimmermann, & Dyrchs, 2011). Although in recent years, continuing financial market instability and uncertainty have resulted in disruption and job losses, (McDonnell & Burgess, 2013), several studies indicate that talent management has gained a greater strategic role within organizations (Gunnigle, Lavelle, & Monaghan, 2013; Zagelmeyer, 2013).

Tung and Lazarova (2006) argue that talent war is here to stay. Lanvin and Evans (2013), based upon Global Competitiveness Index (GCI), also conclude that global talent war is on. Findings from other surveys (such as a Softscape Global Survey, 2009 and a Deloitte–Bersin survey by Benko, Bohdal-Spiegelhoff, Geller, & Walkinshaw, 2014) also indicate that uncertain global market conditions have heightened leadership awareness to developing robust talent management strategies that help organizations attract and retain the best talent. McDonnell (2011) in discussing the pressing role of talent management post global financial crises, has argued that talent management “has never been more decisive because an organization's talent will be one of the principal determining factors in turning the downturn into long term organizational sustainability and success” (169).

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In the literature, GTM has been defined as:

“Systematically utilizing IHRM activities (complementary HRM policies and policies) to attract, develop, and retain individuals with high levels of human capital (e.g., competency, personality, motivation) consistent with the strategic directions of the multinational enterprise in a dynamic, highly competitive, and global environment.” (Tarique & Schuler, 2010, p. 124)

While the definition fits the individual and organizational levels, it omits several aspects of the macro environment that are proving to be invaluable for talent management at the individual and organizational levels. Indeed, several studies have highlighted the macro national aspect of global talent management (Boudreau, 2010; Cooke, Saini, & Wang, 2014; Dutta, 2012; Economist Intelligence Unit, 2011; Heidrick & Struggles, 2012; Oxford Economics, 2014; Special report—outsourcing and offshoring: Here, there & everywhere, 2013; Strack et al., 2011). It showed that the war for talent had intensified and gone global, as many governments (including Australia, Canada, Germany, UK and USA) had joined the hunt for global talent by developing immigrant friendly policies. Some governments (for example, China and India) are also luring back skilled diaspora, and many others have been making serious investments in education and human development of their own citizens (for example, Singapore) — what Oxford Economics (2014) refers to as “home growing” (2). These efforts have been part of government-led policies of strengthening respective countries through human talent, and aimed at spurring economic growth by upgrading local capabilities and building innovative capacities of firms (Oettl & Agrawal, 2008; Ragazzi, 2014; Saxenian, 2005; Tung, 2008; Zweig, 2006).

The macro view of GTM, that includes a discussion of country level activities (both governmental and nongovernmental) has largely been ignored in the literature, as a majority of the current research either maintains a focus upon organizations and individuals, or presents a comparative view of how organizational talent management systems operate in different national contexts (Ariss, Cascio, & Paauwe, 2014; Farndale, Pai, Scullion, & Sparrow, 2014; McDonnell, Lamare, Gunnigle, & Lavelle, 2010; Tyman, Stumpf, & Doh, 2010). These presentations of GTM, although take varying national contexts into account, ignore aforementioned governmental and nongovernmental efforts to manage global talent.

Active involvement of various governmental and nongovernmental organizations in attracting and developing talent makes GTM truly a global issue, which reaches beyond a single organization and its human resource management activities. It draws attention to complexity of the environment within which organizations develop their talent management systems, and individuals make career choices. It incorporates cross border flow of talent, diaspora mobility, and government policies to attract, grow, develop and retain the talent nationally for innovation and competitiveness, which facilitates talent management activities within organizations. We therefore suggest that the scope of GTM extends beyond an individual and organizational analysis to incorporate a contextualized macro view in order to fully comprehend the complexities of managing talent in today's globalized world, where organizations are not only competing with each other but governments and diasporas have also joined the race (Lanvin & Evans, 2013; Leaders: The magic of diasporas, 2011; Ragazzi, 2014). As such, we propose definition of macro GTM (MGTM) as:

The activities that are systematically developed by governmental and nongovernmental organizations expressly for the purpose of enhancing the quality and quantity of talent within and across countries and regions to facilitate innovation and competitiveness of their citizens and corporations.

By promoting the macro perspective, we want to broaden the scope of GTM beyond its current singular focus on individuals and organizations. As GTM continues to become an increasingly complex phenomenon with continuous changes across national and social contexts (which will be discussed in details in this paper), we argue that in order to generate a more comprehensive understanding and further theory development of the phenomenon, we need to explore other fields and disciplines and engage in an interdisciplinary research (Cheng, Guo, & Skousen, 2011; Cheng, Henisz, Roth, & Swaminath, 2009; Hitt, Beamish, Jackson, & Mathieu, 2007; Khilji & Keilson, 2014; Kuhn, 1962). Our hope is that the research community can shape, build and strengthen knowledge and practice in the area of GTM in order to help businesses as well as governmental and nongovernment — level policy makers address the complexities of managing talent in today's global labor market.

The paper is organized in four sections. We begin with a brief review of the GTM literature to discuss the significance of the topic and the variations in how it is defined. We present MGTM to identify the role of respective governments in poaching skilled workers, using an integrated country-level human development agenda related to talent development and the diaspora effect in economic development of emerging economies. We also outline the importance of knowledge flows, innovation and learning in international talent mobility to highlight critical country effects related to GTM debate. Next, we present arguments to make a case for broadening the scope of GTM beyond organizational and individual aspects. In addition, we propose a conceptual model of MGTM that incorporates multi-level analyses of individual, organizations and societies, and encapsulates environmental factors, processes and outcomes related to GTM. We hope that this conceptual framework can serve to present MGTM as an inter-disciplinary phenomenon, and provides building blocks for future research.

## 1. The need for the macro view

There is a wide variation in how GTM is defined (Aston & Morton, 2005; Collings, 2014; McDonnell, 2008; Scullion, Collings, & Caligiuri, 2010), which has contributed to a lack of clarity regarding its overall goals (Lewis & Heckman, 2006; McDonnell, Collings, & Burgess, 2012; Tarique & Schuler, 2010). While some scholars have focused upon core functions of GTM to define it as an organization's efforts to attract, select, develop and retain key talented employees on a global scale, others have used literal meaning of talent to address management of top talent within organizations (Collings, 2014; Collings & Mellahi, 2009; Stahl et al., 2007).

Several scholars have also emphasized the need for organizational competitive advantage by identifying strategic positions and roles (Blass, 2007; Boudreau & Ramsted, 2007; Gunnigle et al., 2013; Heinen & O'Neill, 2004; Huselid, Beatty, & Becker, 2005; Scullion et al., 2010; Zagelmeyer, 2013). Because of a wide variety of definitions, GTM's conceptual boundaries remain fuzzy (Mellahi & Collings, 2010) that has engaged researchers in a hot debate regarding its place within the international human resource management (IHRM) literature (McDonnell et al., 2010; Tarique & Schuler, 2010), and a merit in it being studied in its own right (Scullion et al., 2010). We argue in favor of developing an interdisciplinary approach to studying GTM that allows us to develop a more expansive view (Khilji & Keilson, 2014; Ragazzi, 2014). This will be established with the help of a conceptual framework later in the present paper.

In order to highlight the significance of GTM, researchers have referred to several factors, including competitive global environment (Farndale, Scullion, & Sparrow, 2010; McDonnell et al., 2010), shifting demographics (Aiman-Smith, Bergey, Cantwell, & Doran, 2006; Heid & Murphy, 2007; Khilji & Keilson, 2014), rise of emerging economies and international mobility (Collings, 2014; Khilji & Keilson, 2014; Li & Scullion, 2010; Tung, 2008; Tyman et al., 2010), demand-supply gaps or talent shortages (Aiman-Smith et al., 2006; McDonnell, 2011; Oxford Economics, 2014; Stahl et al., 2007) and the need for global integration of processes and systems (Collings, 2014). Overall, scholars have concluded that GTM is a timely topic, and that organizations must build new capabilities in order to revitalize their competitive standing. In discussing the importance of GTM, Tarique and Schuler (2010) pay particular attention to factors external to the organization. They refer to the talent flow related to migration of individuals across countries, differences in the population dynamics of developed and developing countries and talent shortages globally to develop an integrative framework of GTM in multi-national corporations (MNCs). However, they fall short by maintaining a narrow focus on developing GTM within organizations, thus limiting the scope of its study.

As mentioned previously, many governments are pursuing policies of strengthening their respective countries, and focusing upon upgrading local capabilities and developing innovative capacities through their human talent. For example, developed countries like Australia, Canada, UK and USA have established programs to attract global talent via immigration. Some emerging countries (such as China, and India) are luring back skilled diaspora (Ragazzi, 2014), and other countries like South Korea, Taiwan, Malaysia and Singapore have made serious investments in education and human development of their own citizens (Oxford Economics, 2014). It is therefore surprising that (while some scholars have identified the pressure of external factors in pushing organizations to cater to GTM), literature has been silent on role of the governmental and non-governmental organizations and how these fit within the realms of GTM. This paper is developed with the purpose of highlighting the increasing participation of governmental and nongovernmental organizations in attracting and developing talent. We will argue in favor of incorporating a macro view of GTM in order to expand the scope of GTM (beyond individuals and organizations) to specifically address issues related to global labor mobility, and knowledge flow. Below we explain a macro view of GTM, captured from outside the mainstream GTM and HRM literature.

Scholars have argued that globalization and the rise of emerging economies have brought about dramatic changes to national and social contexts during the past few decades (Buckley & Ghauri, 2004; Gupta & Wang, 2009; Ramamurti, 2010). As expected, GTM has not been immune to these changes. In particular, we highlight four trends that have shaped its process and outcome. These include Global Mobility, Integrated Human Development Agenda, the Diaspora Effect and Brain Circulation, and Talent Flow and Learning.

### 1.1. Global mobility

The United Nations (UN) estimates that in 2013, 232 million people were living outside their country of birth (UN, 2014). This is 3.25% of the world population, and constitutes 78 million more people than in 1990 and 58 million more than 2000. Most of these migrants are of working age and account for 74% of the total migrant population. These numbers are impressive and indicate that international migration is an important characteristic of today's global economy (Kapur & McHale, 2005; Pritchett, 2006). Clemens, Montenegro, and Pritchett (2008) argue that current (or future) crises (for example, recent economic downturn), demographic shifts (an aging population in developed countries and a growing young population in developing and emerging economies), large and growing international wage gaps, increasingly global economic systems and climate change have contributed to a higher human mobility across the globe. Another important factor contributing to this trend is the global market for talent (Khilji & Keilson, 2014; Tung, 2008).

Several countries have been competing for the world's most skilled and qualified workers in an increasingly global labor market via their immigration policies. Kapur and McHale (2005) state, "official pronouncement on immigration policy has been couched in the language of 'national competitiveness', especially in knowledge-intensive sectors" (p. 37). This is clearly apparent in the immigration strategies adopted by Australia, Canada, Germany, UK and USA, the biggest 5 competitors in the international market for talent. United States' (US) President Obama outlined in his national security policy, "The United States must ensure that we have the best-educated workforce, a private sector that fosters innovation... to compete in a globalized environment" (The White House, 2010, p. 10). Australia's Minister for Immigration argued, "To succeed in a new century, we need a highly educated and scientifically educated workforce... A well targeted and well managed Migration problem can help us augment such a workforce" (cited in Kapur & McHale, 2005, p. 36). Successive Australian governments have stayed committed to accepting skilled immigrants (Dept of Immigration & Border Protection, Australian Government, 2014). Germany's immigration policy is also embedded in its ongoing need to bolster its economic development, and maintain a dynamic workforce (Oezcan, 2004) especially in view of its aging population and a continuing low fertility rates. In 2013, the number of foreigners living in Germany reached a record 7.2 million. It has been growing at the fastest rate in 20 years (Ferdman & Yanofsky, 2013); between 2007 and 2012, it increased by 72% (Faiola, 2014). Similarly, Britain has pursued a Highly Skilled Migrant Programme (HSMP) and Tier 1 (General) Plan in its efforts to keep its economy globally competitive (UK Border Agency, 2012). Canada is one of the world's friendliest nations for immigrants and has the highest

per capita admission rate. It has offered residency to approximately 200,000 immigrants (and refugees) per year for the past decade and has earned a reputation for an “open arms” attitude (Council for Foreign Relations, 2006). It has followed a merit and point system to bring in sought-after talent into Canada.

Other countries with limited physical and human capital have also joined the race for attracting global talent. For example, Singapore has developed creative immigration policies to attract skilled entrepreneurs and working professionals from around the world, in order to sustain its economic development. In 2013, 38% or more than one third of the total Singaporean population was foreign born (Dept of Singapore Statistics, 2013). This was the result of targeted programs such as “Contact Singapore”, the “Singapore Talent Recruitment (STAR)”, and “Manpower 21”. In particular, developing International Manpower Program under the Economic Development Board (EDB) was a clear signal of the government’s policy for planning and executing strategies to enhance Singapore’s position as a global business center and grow the Singaporean economy.

### 1.2. Integrated human development agenda

Several countries, particularly in Asia, have identified human resources as the single most strategic capital for their economic development. Singapore, a small country with no natural resources, is a good example of a country that has become a developed country within a few decades and has now been consistently ranked as the world’s second most competitive country (OECD, 2012, 2014), primarily due to its strong emphasis on development of its people (Osman-Ghani, 2004) and ready availability of scientists and engineers (OECD, 2014). OECD (2012, 2014) reports that in addition to corruption-free institutions, efficiency of its goods and labor markets, and world-class infrastructure, “the country’s competitiveness is reinforced by a strong focus on education, providing individuals with the skills needed for a rapidly changing global economy” (OECD, 2012, p. 1). Washington-based risk consultancy agency, Business Environment Risk Intelligence (BERI) has rated Singapore’s workforce as the world’s best workers since 1980, and has referred to it as a highly skilled and cosmopolitan workforce (MAS, 2012; Singapore Government, 2014). A study by INSEAD found Singapore home to Asia’s most skilled and world’s sixth most skilled. Singapore is also consistently rated as having the best business climate in the world (World Bank, 2014).

Singapore’s highly ranked workforce is the result of its government’s deliberate and serious policy of developing its human resources. The government has spent millions of dollars in developing a world-class educational system that develops talented and driven individuals, and developed a skill upgrading system to help individuals continually develop their core competencies with the changing global environment. In 2010, the government rolled out S\$ 2 billion National Productivity Fund and introduced “Productivity and Innovation Credit”, to allow companies to deduct 250% of their expenditure incurred on activities that boost productivity and innovation including training of employees (Business Climate, 2010). The Chairman of the EDB of Singapore that develops and implements talent development initiatives states, “We see ourselves offering value to global companies that are expanding in Asia but at the same time, value to Asian companies that are going global. EDB’s home strategy is to have companies use Singapore as their strategic location to grow, to expand their business, their innovation, their talent activities to help them grow [not just] in Asia but globally” (Business Climate, 2011). This clearly suggests an integrated government-led policy of developing global talent for international competitiveness and economic development. Using Singapore as a case example, Osman-Ghani (2004) argues that an integration of national talent development strategy with targeted objectives is critical to a country’s success in achieving economic development.

Singapore serves as a good example of a country where macro policies are strategically designed to shape organizational and national talent development priorities. For a deeper discussion of MGTM, it is hence important to explore: *Whether Singapore is only a ‘special case’ or its policy trajectory more or less generalizable to other countries?* One may begin to argue that Singapore is a unique case because it has (probably) the clearest national strategy to grow and attract the best talent (Lanvin & Evans, 2013). However, the recent Global Talent Competitiveness Index (GTCI) Report (Lanvin & Evans, 2013) shows that along with Singapore, Switzerland and Denmark are also leading the global war for talent. Both these countries also have a longstanding commitment to providing quality education and continuous training. Their success in adopting appropriate talent policies to spur economic development has influenced many other countries to emulate (Malik, 2013). As a result, Estonia, Montenegro and Malaysia have emerged as new ‘talent champions’, and are respectively ranked 23rd, 26th and 37th on GTCI among 103 nations, on the basis of their impressive measures to mobilize their talent base (Lanvin & Evans, 2013). For example, successive Malaysian governments have accorded high priority to national talent development (via education, industrial training, and harmonious industrial relations) under five-year development plans. Faced with talent shortages, Estonian government has also embarked on a talent policy that focuses on local talent growth and retention simultaneously (Kriss, 2014).

Many other countries are also following suite globally, albeit in a piecemeal fashion. For example, Pakistan provides a “best practice example for developing countries” (Bernard Michael Rode, UNESCO Chairman quoted in Hayward, 2009) in implementing higher education reforms (Khilji, 2012). According to Human Development reports, China, Nepal, Indonesia, Lao PDR and Republic of Korea were among the top 10 “mover’s List” in terms of governments making serious investments and upward leaps in health and education of their people since 1970 (UNDP, 2010), and Bangladesh, Mauritius and Turkey are reshaping ideas about how to attain human development (UNDP, 2014). These examples illustrate that there may not be ‘right policies’ universally, but countries around the world are drawing lessons from successful countries, such as Singapore (Malik, 2013).

### 1.3. The diaspora effect and brain circulation

As mentioned previously, there are 232 million first generation migrants around the world (United Nations, 2014). As 3.25% of the world’s population, immigrants could make a nation as big as Brazil. “There are more Chinese people living outside China than there



are French people in France. Some 22 million Indians are scattered all over the globe” (Leaders: The magic of diasporas, 2011, p. 13). Diaspora network has always been a potent economic force (Chand, 2013; Tung & Lazarova, 2006), however particularly in recent years, their ability to connect the home economy to international business networks by leveraging their reputation, education and experiences been instrumental in the success of (for example) Bangalore as the Indian IT hub and global destination of off-shoring and rapid economic development of China (Cervantes & Guellec, 2002; Chand, 2012; Chen, 2008; Kapur & McHale, 2005; Saxenian, 2005). Diasporas have demonstrated their ability to shape global business, politics and social development. Cambridge–Oxford educated Indian Prime Minister, Manmohan Singh, played a critical role in bringing economic reform to India in 1990s when it was on the verge of a collapse. More than half a million Chinese who have studied abroad and returned to dominate the think-tank, advise the government, are moving up the ranks of Communist party, establishing new businesses thus having a positive impact on technology transfer and economic development (Chen, 2008; Leaders: The magic of diasporas, 2011; Liu, Lu, Filatotchev, Buck, & Wright, 2010).

China, following Korean and Taiwanese footsteps, provides a good example of a country that has successfully embarked on a comprehensive policy of luring back diaspora. Zweig (2006) traces Chinese interest in diaspora to 1990s when the central government realized that in order to improve science and technology in China, it had to let people go abroad freely, and then compete for them in the international market by creating a domestic environment that would attract them. Subsequently, Chinese government improved environment for diasporas and returnees by developing job introduction centers, offering preferential policies (of giving them more living space and higher professional titles), establishing a national association of returned students, and increasing support for scientific research. Local governments also started competing for talent by instituting their own policies. At the same time, universities and government-funded research organizations also actively started recruiting diasporas and returnee. Many other countries, in Asia and Eastern Europe, have adopted similar practices to lure back highly skilled diaspora for their respective economic development (Ragazzi, 2014; Tung & Lazarova, 2006).

These programs and incentives have resulted in a reverse brain drain, or what Saxenian (2005) refers to as ‘brain circulation’ (p. 36), i.e. the ability of the diaspora as well as returnees to establish business relationships or to start new businesses while maintaining their social and professional ties elsewhere (countries they graduated from and gained experience in). These returnees have proven critical to the overall development of talent nationally by transferring their knowledge and experience to the people they work with. Overall, modern diasporas have played a key role in integrating their countries of birth (or ethnic origin) to the global economy (DeVoretz & Zweig, 2008; Kapur & McHale, 2005; Tung & Lazarova, 2006; Tung, 2008), and establishing a new form of economic growth model through entrepreneurship and experimentation (Saxenian, 2005). Macro level talent development policies targeted at this group have certainly helped improve the quality of talent nationally in respective countries. However, diaspora engagement requires appropriate integration, assimilation and trust building (Enderwick, Tung, & Chung, 2011). Tung and Lazarova (2006), based upon a study of returnees in Eastern European countries, note that re-adjustment can be challenging. Many returnees (particularly those from medium human development index countries) are frustrated by (for example) ‘outdated infrastructure’, ‘working with colleagues whose views are very different from theirs’, ‘lack of career opportunities’, and “home country not meeting their expectations” (1865). They conclude that adequate government policies must be implemented to address these challenges.

It is clear from the above examples that talent development has been adopted as a national agenda by many countries. Some developed countries have implemented attractive immigration policies for highly skilled workforce (for example, UAE has become global ‘talent hubs’ because of its dynamic economy and clear policy to attract external expertise – Lanvin & Evans, 2013), and others have focused upon developing its talent nationally via education, and training of its human capital (for example, Denmark, UK, Sweden are pursuing a strategy to become ‘talent competitive’ via quality education – Lanvin & Evans, 2013). Those countries with a large population that emigrated elsewhere (mostly to the West) for better opportunities decades earlier, are luring back well-established diaspora in order to benefit from their expertise and connections and develop younger talent effectively (for example, China, Pakistan and India with their policies to bring back their diaspora for shorter to longer durations – Khilji & Keilson, 2014; Ragazzi, 2014). It is also apparent that a macro view is important to the discussion of GTM (even at the organizational and individual level) because it has given rise to many new phenomena, including brain circulation and the efforts to maximize the diaspora effect (Cervantes & Guellec, 2002; Saxenian, 2005; Tung, 2008).

#### 1.4. Talent flow and learning

A greater mobility of talent stimulates international transmission of ideas (Agarwal, Kapur, McHale, & Oettl, 2011; Kapur & McHale, 2005; Liu et al., 2010), produces knowledge flows (Carr, Inkson, & Thorn, 2005; Di Maria & Lazarova, 2009), enhances learning (Furuya, Stevens, Bird, Oddou, & Mendenhall, 2009) and improves efficiency of the innovation process (Oettl & Agrawal, 2008). As people move and interact across organizations and societies, they provide greater access to knowledge and reduce the need to recreate knowledge that already exists elsewhere. They also gain diverse experiences, hence serve as a prime source of learning for organizations and societies (Barkema & Vermeulen, 1998; Berthoin, 2001; Di Maria & Lazarova, 2009; Nonaka, 1994; Penrose, 1959). Romer (1990) argues that knowledge spillovers that occur outside traditional market mechanisms have become central determinants of economic growth worldwide. The rapid economic development of many countries discussed in this article (particularly China, India, Singapore etc.) provides support to this economic theory. As an example, the planned talent development agenda by the Chinese government is aimed at facilitating knowledge sharing, and benefit from the social exchange that takes place between the receiving organizations/country and the diaspora to promote national learning (Saxenian, 2005). As mentioned previously, Chinese policy makers have put in place specific mechanisms and well-integrated strategies with the purpose of enhancing cross-border knowledge flows and spillovers that resulted in rapid economic development.

Emerging evidence in international business (IB) literature indicates critical importance of the impact of talent mobility on country-level innovation performance, well beyond the much-understood firm-level innovative capacities. For example, Oettl and Agrawal's (2008) study of cross-border movement of inventors (diaspora) presents an analysis of knowledge flow patterns as people move from one country (and firm) to another. Their analysis indicates that knowledge flows don't necessarily follow organizational boundaries as diasporas continue to develop and tap social relationships. They conclude that the receiving country (that diaspora returns to) learns and gains above and beyond the knowledge flow benefits enjoyed by the receiving firm. Based upon the findings, they emphasize the need for and the extensive role of national learning (from the diaspora) outside the traditional market mechanisms. Liu et al. (2010) panel data, constituting technological characteristics of Chinese firms, and innovative performance, also indicates that talent mobility is an important source of knowledge spillovers. They argue that returning diaspora's presence facilitates technology transfer to other firms in the receiving country, thereby leading to enhanced economic growth. Both of these studies are pioneer in examining the crucial value of talent mobility to the global economy. These provide evidence of the complexity of GTM as a phenomenon in the global marketplace, as well offer good insights for broadening the scope of GTM to include discussions relating to knowledge flows, innovation, learning and competitiveness, which have not been sufficiently addressed in core GTM literature.

## 2. Conceptual framework

GTM has become an increasingly complex phenomenon in today's marketplace with enhanced talent mobility and national-level competition for talent globally. Hence, it requires theoretical explanations (and developments) that are multi-level and deeply embedded contextually. As we start to extend our understanding of GTM to complex macro aspects that relate with an economic development agenda or competitiveness, we begin viewing it in terms of the diaspora effect, global mobility, talent flows and learning—or the current trends facilitated by today's intensely competitive, dynamic and globalized environment. Hence we need to expand the scope of GTM beyond international human resource management activities and adopt an interdisciplinary approach that integrates ideas from different disciplines (such as international business, demography, economics, education, geography, and sociology) and fields (such as finance, management, human resources, innovation, knowledge management, strategy, and public policy). Using multiple forms of knowledge and methods is critical to the advancement of GTM as field of inquiry because it offers a more encompassing understanding of the problems facing GTM practitioners and researchers as well provides opportunities for developing well-informed integrative organizational strategies and public policies (Cheng et al., 2009).

Based upon these arguments, we propose a conceptual framework of GTM (refer to Fig. 1) constituting of environment, processes and outcomes:

### Macro Global Talent Management (MGTM): A Conceptual Framework

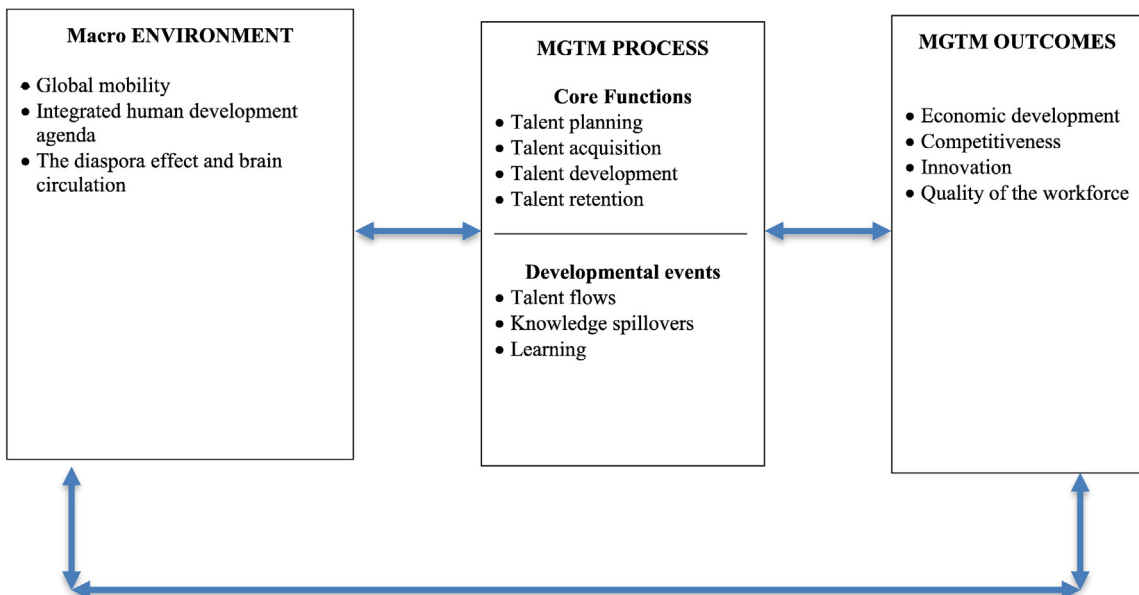


Fig. 1. Macro global talent management (MGTM): a conceptual framework.

## 2.1. The GTM environment

GTM is highly contextualized, much like any other IB phenomena. As mentioned previously, it has undergone major shifts in recent decades as economies worldwide have adopted integrated human, social and economic development agendas in an intensely global and competitive environment, and the talent mobility has increased. We conceptualize globalization, intense competition (at the organizational and national levels), and population dynamics (in terms of an aging population in some developed countries and a substantially large young populations in emerging countries) as the most critical environment factors in contemporary marketplace. Additionally, as has been highlighted previously, facilitating international migration in order to attract and retain global talent, a well-conceived and deliberate human development agenda in order to develop local talent, and the diaspora effect/brain circulation that has led to economic development through entrepreneurship, knowledge transfer and experimentation (Khilji & Keilson, 2014; Oettl & Agrawal, 2008; Saxenian, 2005; Tung & Lazarova, 2006), have served as important environmental trends that have helped heighten the relevance of GTM at a macro level.

We are aware that environment is dynamic and uncertain and none of the identified factors are likely to remain stable or the same. For example, by 2030, population dynamics may have already changed (Kunzig, 2011), depending upon the development and demographic priorities of many developing and developed countries globally. Hence, an understanding of GTM would need to be continuously updated in order to refine existing theories, and /or develop new ones in order to keep pace with the evolving world and remain relevant (Cheng et al., 2011; Khilji, 2012). In sum, environment will always remain critical, the trends and factors are likely to evolve and shift over time.

## 2.2. GTM process and outcome

The discussion in present paper has revolved around critical processes relating to GTM. We have argued that talent produces knowledge flows, causes spillovers, and can be used for knowledge sharing as well as (organizational and national) learning. These aspects constitute GTM processes because they describe how talent relates to organizational and country level changes over time, identify patterns of activities and explain an observed relationship between talent and the desired outcomes of national competitiveness, innovation and economic development (Liu et al., 2010; Oettl & Agrawal, 2008; Tung, 2008). By its very nature, process is diverse, evolving and cannot be contained within a single paradigm (Van de Ven, 1992). This is also true of GTM processes because a) these are likely to shift with the changes in environment, and as and how scholars/practitioners adopt new lens to examine the old phenomena or continue to capture new phenomena, and b) these emanate from diverse disciplines and fields, including geography, economics, education and international business, thus cannot be completely explained by a single paradigm. Hence a fuller understanding of the GTM process (as proposed in our framework) would require multi-level analyses – individual, organizational, national and even global.

We also include the core functions of GTM identified previously as talent planning, talent acquisition, talent development, and talent retention (Scullion et al., 2010; Stahl et al., 2007; Tarique & Schuler, 2010) as part of the GTM process, because these functions provide impetus for related GTM activities. For example, even if we study diaspora effect at the country level, we need to still discuss public policies and practices related to planning, attracting, and retaining talent nationally and globally. However, at the same time, our discussion indicates the importance of talent flow, knowledge spillovers and learning in carrying out the basic core functions of GTM. As global mobility has increased, and several governments have adopted integrated human development agenda, it is equally important (if not more) to study talent flows and learning strategies/mechanisms in order to fully capture the essence of GTM at the macro level.

It is critical to focus upon GTM outcomes, which as our review has identified, predominantly relate to economic development, competitiveness and innovation at the firm and national levels. We have argued that GTM has emerged as a macro phenomenon that requires an interdisciplinary approach in its study because of a greater emphasis on achieving these outcomes in an intensely competitive and global environment.

Incorporating a macro view advances GTM to a policy and practice domain, and expands its scope to organizations, individuals and countries. Using multi-level lens reveals the richness of GTM, draws our attention to the context in which it occurs and illuminates its multiple consequences traversing levels of analysis (Hitt et al., 2007). It also captures the essence of complexities associated with managing talent globally, where organizations are not only competing with each other, but diasporas and national governments have also joined the race to acquire and retain talent globally. We hope that researchers recognize the broader scope of GTM as explored in this paper and use the conceptual framework proposed in Fig. 1 to further engage in interdisciplinary research, practice and policy related to GTM as it applies to individual, organizations and societies globally. Our intention is not to bifurcate GTM into camps of micro and macro experts, but to engage scholars in integrative analyses thereby improving understanding of its theory, policy and practice.

We would like to offer a word of caution here. The conceptual framework presented in Fig. 1 should not be viewed as being linear or simple relationships. Scholars argue that societies and organizations are complex social systems (Anderson, 1999). A rapid pace of globalization has also added new elements of complexity to the human dynamics (Lane, Mazenvski, MendeHall, & McNett, 2004). Accordingly, the macro GTM model should be viewed as being made up of large number of parts that interact in a non-simple and linear manner (Phene & Tallman, 2012; Simon, 1962). Applying this understanding to macro GTM presents it as a system that requires interactions between different partners on a number of issues and levels, representing varying level of complexity. We would also like to mention that the proposed framework doesn't capture an exhaustive list of trends, outcomes and processes. As scholars continue to

explore the multi-level aspects of macro GTM as a phenomenon, they are likely to unravel and add other issues to this framework. Hence we admit we have merely scratched the surface based upon our current understanding of the global environment. We hope other researchers continue to critique and build upon it.

### 3. Future directions for research

Future research opportunities abound in GTM. This area will continue to remain a hot topic because of the world population dynamics and the global generational divide. A majority of the future growth in the world population is expected to occur in developing or emerging economies. As a matter of fact, nearly half of the increment to the world population is estimated to come from only six countries; India (22%), China (11%), Pakistan, Nigeria, Bangladesh and the US (17% at approx. 4% each). This presents an interesting paradox because on one hand some countries in Asia Pacific, and Europe (including France, Spain, Japan and Germany) are aging fast and the proportion of the working-age people in the population is shrinking (McDonnell et al., 2012). On other hand, in countries like India, Bangladesh and Pakistan, 31–36% of the workforce is 14 years of age or below. These countries are faced with the crisis of making them employable for an increasingly complex and global environment. By 2050, developed countries will not have enough workers to support the higher cost of their aging populations. Developing countries with younger population will not have enough jobs. Khilji and Keilson (2014) argue that a global generational divide is likely to emerge as a workforce issue, where a majority of the young will be based or come from developing countries, and aging from the developed. It is likely to result in increased international migration, more involved human development agenda, and even stiffer competition to lure talent, thereby increasing the need to examine GTM at diverse levels and across multiple disciplines such as geography, demography, economics, sociology, international business, and education and distinct fields, such as human resource management, knowledge management, innovation, organizational development and finance.

A multi-level view of GTM, that incorporates country effects/influences in addition to individual and organizational levels of analyses, therefore, presents an opportunity for scholars to adopt an interdisciplinary approach. It allows us to “escape from externally defined silos of narrow theoretical and empirical legitimacy”, and helps us implement a research agenda that avoids creating new silos (Cheng et al., 2009, p. 1072). Many other scholars have also argued in favor of developing interdisciplinary research, because by allowing us to draw upon knowledge, theory and methods used in multiple disciplines, it can help us solve problems and/or develop a more holistic understanding of complex issues that we face today (for example, see Cantwell & Brannen, 2011; Cheng et al., 2009; Doherty, 2012; Hasnas, Prentice, & Strudler, 2010; Judge, Weber, & Muller-Kahle, 2012; National Academy of Sciences, 2004). Combining ideas from two or more disciplines is more likely to lead to breakthrough knowledge, create new theories and advance a more comprehensive understanding of a phenomenon as complex as GTM. Some possible research questions that allow further interdisciplinary exploration of the GTM phenomenon (as outlined in the present paper) include (please refer to Table 1):

1. Identify and establish variables to study talent mobility in GTM: The increasing talent mobility represents a new feature of the globalized economy/society that has not been focused upon before (Liu et al., 2010; Tung, 2008). Hence, it is quite important to identify and establish some variables that could be used to study talent mobility at a global scale. This is likely to benefit future studies investigating the role, process and performance of macro GTM. In this regard, questions such as: what is talent mobility, how is it defined, how does it impact societies/economies, could serve as good starting points, and how does technology impact talent mobility? GTM researchers have recently developed an interest in talent mobility and similar concepts using the economic

**Table 1**  
Some possible research questions further examining macro GTM.

Domain	Research questions
Talent mobility in the global economy/society	<i>Identify and establish talent mobility variables:</i> What is talent mobility? How is it defined? How does it impact societies/economies?
International knowledge transfer and talent mobility	<i>Explore the impact of talent mobility on international knowledge transfer:</i> What is the impact of talent mobility on economic growth? What is the impact of GTM processes on innovation performance (and other GTM outcomes)? What are the primary mechanisms for enhancing GTM outcomes for global/local organizations and developed/emerging economies?
Knowledge spillovers and flows	<i>Examine the net effect of knowledge flows and spillovers to highlight the broad scope of GTM:</i> What types (and how) of knowledge flows/spillovers enhance socio-economic benefits related to GTM? How do knowledge flows relate to talent mobility and innovation performance? How can organizations and societies optimize knowledge flows and spillovers in order to improve innovation and economic performance?
The diaspora effect	<i>Explicate the diaspora effect as it relates to GTM:</i> What is the diaspora effect in GTM? How do individuals, organizations and societies benefit from it? How do diasporas and local individuals learn from each other? What mechanisms can be used to enhance learning from diaspora?
Human development agenda	<i>Explain the role of human development priorities in succeeding at GTM:</i> How does a well-conceived human development agenda enhance a country's success at talent acquisition, talent development and talent retention?
Talent flow and learning	<i>Examine the role of learning in GTM:</i> What is the role of learning in GTM? Does a high level of learning translate into enhanced talent retention or mobility? What type of environment facilitates social, individual and organizational learning? What types of socio-economic as well as organizational mechanisms enhance learning of the individuals and transfer of knowledge?



- geography perspective (for more information see Sparrow, Scullion, & Tarique, 2014). The economic geography literature can also extend the talent mobility research in several ways both on the theoretical and methodological fronts.
2. Explore the impact of talent mobility on international knowledge transfer: IB scholars and policy makers have paid attention to the impact of foreign direct investment (FDI) and trade on international knowledge transfer. However, the growing talent mobility represents a new channel of international knowledge transfer (Liu et al., 2010; Saxenian, 2005). Research exploring the impact of talent mobility on economic growth, international knowledge transfer, technology adoption, learning and innovation are likely to establish GTM as an important field of study within IB. Other questions investigating the impact of GTM processes on the innovation performance of global and local companies, and primary mechanisms for enhancing GTM outcome for global and local organizations, as well as for developed and emerging economies are worthy of consideration.
  3. Examine the net effect of knowledge flows and knowledge spillovers to highlight the broad scope of GTM: What is the net effect of knowledge flows and spillovers on GTM? Exploring this question would require examining how individuals, organizations as well as countries gain from knowledge flows and spread of ideas via international migration. Other pertinent questions in this domain include: What types of (and how) organizational-level and national strategies are needed to enhance social and economic benefits of knowledge flows? How do knowledge flows relate to talent mobility and innovation performance? How can organizations and societies optimize knowledge flows and spillovers in order to improve innovation and economic performance? These questions are likely to address calls by scholars to bridge the gap between talent management and knowledge management (Li & Scullion, 2010).
  4. Explicate the diaspora effect as it relates to GTM: The diaspora effect, as discussed in this paper, has been discussed in economics and sociology in recent years. However, there is a need to explicate this effect as it relates to GTM in greater details. In particular, questions such as: What is the diaspora effect in GTM? How do individuals, organizations and societies benefit from the diaspora effect? How do individual diaspora and/or those interacting with them learn from each other? What (organizational and societal) mechanisms enhance social relationships formed between individuals due to co-location (because research indicates that it persists even after separation caused by greater mobility of employees, and leads to economic gains – Mellahi & Collings, 2010; Oettl & Agrawal, 2008)?
  5. Explain the role of human development priorities in succeeding at GTM: The concept of human development (HD) has been used to shift the focus of economics from national income accounting principles to people-centered policies. Sen (2012) has argued that HD is an approach concerned with advancing the richness of human life, rather than the richness of the economy. We have discussed that well-planned national human development agendas are being employed to achieve economic development. Hence, exploring how does rigorous human development agenda enhance a country's success at talent acquisition, talent development and talent retention is likely to enrich the study of GTM, as well contribute to the debate focusing upon HD before economic growth.
  6. Examine the role of learning in GTM: Learning is a building block of social, economic and behavioral development (Luo & Peng, 1999; Sirmon, Hitt, & Ireland, 2007). The conceptual framework, presented in Fig. 1, also depicts centrality of learning to achieving GTM outcomes. However, there is an evolutionary relationship between learning and environment (Nelson & Winter, 1982). Scholars have argued that experience is a primary source of learning, and individuals (as well organizations and societies) have to cope with the multitude of experiences in a specific environment to be able to gain/transfer knowledge (Levinthal & March, 1993; Penrose, 1959). What is the role of learning in GTM (Vivas-Lopez, Perris-Ortiz, & Rueda-Armando, 2011)? Does a high level of learning translate into enhanced talent retention or mobility? What type of environment facilitates learning? And what types of socio-economic as well as organizational mechanisms enhance learning of the individuals and transfer of knowledge? Such questions are likely to inform GTM theory as well provide important recommendations to practitioners and policy makers.
  7. Examine the academic practice gap between academics and governmental/nongovernmental agencies. Tarique and Schuler (2010) in the recent literature review pointed out that GTM is a bridge field with a serious academic practice gap. HR scholars in the context of GTM seldom analyze the findings and issues examined by governmental agencies. Research is needed to facilitate the transfer of knowledge from academics to governmental agencies and vice versa. Action Research (Rynes & Trank, 1999) can be used to examine important problems that have been identified by governmental agencies.
  8. Examining the linear mediated model describing the impact of GTM environment on GTM outcome. We recommend that scholars identify variables not examined in Fig. 1 that may influence the stated relationships. There may be potential moderators of the Environment – GTM Process relationship and GTM process – GTM outcome relationship. One such variable is the economic conditions or the business cycle, which fluctuate over time. Economic conditions can have a significant impact on labor markets such as unemployment levels and the level of available human capital.
  9. Examining the GTM process in detail. Research is needed to take a closer look at relationships inside the GTM process box. Similar to the strategic HRM research, there are complexities surrounding the relationship among GTM activities of planning, attracting, developing and retaining talent. Researchers need to examine these relationships at a macro levels (e.g., country level) and could develop and examine a range of possible configurations or bundles of TM activities, similar to what scholars have done at the organizational level. Another possibility is to develop taxonomy of GTM activities by cluster analyzing the activities at the country level.

These are complex questions; however they remain relevant in a dynamic and constantly evolving marketplace. Researchers could explore them in a variety of ways using interdisciplinary approaches and multi-level analyses. Examining these questions is likely to establish GTM as an important field that is able to provide valuable insights to overall economic and human

development within and beyond multinational organizations. It has been argued that a majority of the existing research on GTM is based upon anecdotal or limited information (Tarique & Schuler, 2010), thus suffers from number of theoretical deficiencies (Farndale et al., 2010; Tarique & Schuler, 2010). Conceptualizing rigorous research questions that cut across several theoretical boundaries is likely to engage scholars in an empirical-based research and lead to a lively discussion of an expansive scope and interdisciplinary understanding of GTM.

#### 4. Implications for managers and policy makers

There is much evidence to suggest that talent shortages will continue in the foreseeable future (despite the current financial crisis), hence organizations cannot become complacent about it (Lanvin & Evans, 2013; McDonnell et al., 2010). Managers need to fully recognize the broad scope of GTM and develop new organizational capabilities that enable them to acquire, grow and retain talent globally with the purpose of improving their innovation performance (Manning, Massini, & Lewin, 2008). As talent mobility increases, a new cadre of global workers will develop multiple identities, and start taking control of their own careers. Managers will have to consider how to interact with them, what strategies to use in order to benefit from their expertise, what reward mechanisms to use in order to retain them, and how to plan their careers if they are not willing to slot their careers into strategic corporate plans (Carr et al., 2005). Managers will also need to develop organizational mechanisms and policies that promote environments conducive for individual and organizational learning, as it is critical to developing effective GTM outcomes.

Recognizing demographic global changes, in particular a global generational divide (Khilji & Keilson, 2014), and interdependencies of talent shortages, is critical for national policy makers. They need to develop more integrated and collaborative GTM policies in order to better compete for talent (Lanvin & Evans, 2013; Manning et al., 2008). Governments also need to become more concerned not only with attracting migrants and diasporas but also in capturing and institutionalizing their skills for national learning and technological developments. They may have to create national diaspora composed of virtual networks of nationals based overseas, who are willing to provide expertise to their home countries (Carr et al., 2005). Finally, much like managers and practitioners, they also need to create socio-economic environments that facilitate and enhance social and national learning. Creating opportunities for research, innovation and entrepreneurship can stimulate flow of talent, as well as provide access to international innovation networks (Cervantes & Guellec, 2002).

Educational institutions are also important players in GTM. In developed countries, they are forging global partnerships with other universities and exchange programs worldwide to train talent and get greater access to global talent pool (Wildavsky, 2010). Currently, they are also recipients of large numbers of students from emerging economies. For example, in the United States, approximately 716,772 foreign students enrolled in a variety of higher educational institutions in 2011–2012 (Institute of International Education (IIE), 2012). These international students gain valuable global experience and often fill important positions upon returning to their home countries (Gareis, 2012). They also provide cheap and easy access to global knowledge that exists elsewhere. However, studies indicate that local students don't actually benefit from richness that these international students bring to their classrooms (Gareis, 2012; Peacock & Harrison, 2009). Universities, as centers of global talent development, must ensure that local, foreign students and faculty members engage in active learning about each other. Overall as Carr et al. (2005, p. 395) have argued that in an increasingly mobile and global world, it is important that policy makers, practitioners, students, and researchers pay attention to processes and complex human dynamics that underline GTM.

#### 5. Contributions, limitations and conclusions

The study contributes in a number of ways to the literature on GTM. First it proposes several theoretical arguments for examining the processes through which the external environment such as economic development and competitiveness influences and has the potential to advance the research on GTM effectiveness. Secondly, it offers several theoretical arguments for examining the role of "MGTM process" in mediating the relationship between the external environment and GTM effectiveness, the so-called the "black box of GTM" (Tarique & Schuler, 2010, 2014). Thirdly, by integrating several streams of research this study attempts to contribute to new theory building GTM by offering a theoretical framework that provides a foundation for others to build from and improve upon. Fourthly, it suggests that further research extends its focus to include more non-American contexts (Collings, Scullion, & Vaiman, 2011). Finally, we argue that GTM, especially in the macro context, is a complex phenomenon and propose an interdisciplinary research agenda. Many scholars have encouraged the use of an interdisciplinary approach in IB (Cheng et al., 2009, 2011; Dunning, 1989; Khilji, 2014). There is a certain advantage to drawing from other disciplines, as the complexity of IB has reached beyond the narrow boundaries of traditional markets. In particular, as we have shown, MGTM is no longer the domain of international HRM scholars as its applicability has extended to other disciplines and fields. Finding solutions to questions related to MGTM would require exploring new disciplines in order to review different assumptions, and engage in rigorous analyses to develop robust new theoretical understandings. The proposed MGTM framework (Fig. 1) makes a value-added contribution to the literature because it combines ideas from multiple disciplines that enhance its scope and provide a more comprehensive view of talent management. This could not have been obtained by relying on a single discipline and/or field. We hope that it is able to stimulate interest in MGTM from a wider variety of disciplines thus enrich our understanding of core MGTM issues.

As with any study proposing a new and broad conceptual framework, there are limitations to this study. First, the operationalization of some constructs can be a major concern. Although, most of the constructs are adapted from prior research on GTM, future work should include more refined measures of the constructs in this study. Second, "model specification" is an important concern: It is important to

determine whether all relevant variables have been included in our model (Schuler, 2015). Third, the ability to generalize our framework across countries may not be reasonable. More research is needed to explore these issues further.

In conclusion, central to the macro aspect of GTM is the development of global labor markets and greater workforce mobility over the past twenty years. Global labor markets have been created in part due to government-led initiatives that prioritize talent acquisition, retention, and development. This process has been facilitated by technological advancements and ease of global communication. In turn, greater workforce mobility, rapid and extensive development of diasporas and international migration (along with the brain circulation and knowledge flows) have exposed the macro implications and country effects of MGTM. It is to be expected that both of these macro aspects of MGTM will continue to evolve and transform over the next decade. Thus we would suggest that MGTM needs to incorporate a more understanding of the role of diaspora in talent development, knowledge flows effects and mechanisms, social networks, and the role of national and organizational learning (the research questions listed in Table 1) in order to benefit from the rise of global labor markets and the increased mobility of the global workforce.

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