Contents lists available at ScienceDirect



And WOR BUSINE Market BUSINE Market More BUSINE

Journal of World Business

journal homepage: www.elsevier.com/locate/jwb

Global talent management and global talent challenges: Strategic opportunities for IHRM

Randall S. Schuler^{a,b,*}, Susan E. Jackson^{a,b,1}, Ibraiz Tarique^{c,2}

^a Rutgers University, 94 Rockafeller Rd; Piscataway, NJ 08854, Switzerland

^b Lorange Institute of Business Zurich, Hirsackerstrasse 46, Horgen, Switzerland

^c Pace University, New York, NY 10038, United States

ARTICLE INFO

Article history: Available online 10 November 2010

Keywords: Talent Challenges Global talent challenges (GTCs) Global talent management (GTM)

ABSTRACT

The need for multinational firms to be as competitive in the global marketplace as possible has increased dramatically over the past twenty years. For international human resource management this has meant many strategic opportunities to international human resource management. An excellent example of such an opportunity is that which exists regarding the management of talent. This opportunity began to develop in the late 1990s with the advent of the challenge of "global talent management." During the past few years this opportunity has expanded to include challenges dealing with talent shortages, talent surpluses, locating and relocating talent, and compensation levels of talent. Together, these conditions are all "global talent challenges". In this article we describe these several global talent challenges and the strategic opportunities they present to firms and propose the implications of these for firms and for the field of international human resource management.

© 2010 Elsevier Inc. All rights reserved.

1. Introduction

In describing the competitiveness of nation in relationship to each other, Porter (1990) conceptualized four key attributes that are often referred to as "Porter's Diamond," Briefly, the four include: strategy, structure and rivalry; demand conditions; supply networks; and factor endowments. Factor endowments refer to a country's productive capabilities, including the qualities and characteristics of its workforce, its natural resources and infrastructure. Increasingly, these factor endowments, particularly the workforces of countries around the world, have received extensive discussion for several reasons. One is that workforces around the world have expanded, both quantitatively and qualitatively. A second one is the expansion of economies and businesses globally, thus increasing the need for larger workforces. A third is that the compensation levels of these workforces vary dramatically across countries, even for comparably skilled workers. The fourth reason is, and following from the previous three, is that firms see that they are able to gain and sustain a global

E-mail addresses: Schuler@rci.rutgers.edu (R.S. Schuler),

competitive advantage when they manage their workforces effectively (Bryan, 2010; Gupta & Govindarajan, 2001; Porter, 1990). To do so successfully, we propose that these firms must confront the reality of several global talent challenges and develop global talent management initiatives to address these challenges.

1.1. Talent becomes important

Beginning in the late 1990s, firms around the world were confronted with a major threat to doing business: a demand for talented employees that far surpassed the supply, thus creating a global talent shortage (Chambers, Foulon, Handfield-Jones, Hanklin, & Michaels, 1998; Michaels, Handfield-Jones, & Axelrod, 2001). As a consequence, "talent acquisition, retention and management" became a key expression (challenge) in global business (Guthridge, Komm, & Lawson, 2008). The interest in this challenge came to be embraced with the label of "global talent management" or GTM (Beechler & Woodward, 2009). Reflecting the wide acceptance of GTM after the seminal book entitled The War for Talent (Michaels et al., 2001), several special issues of academic journals such at the Journal of World Business (Scullion, Collings, & Caliguri, 2010) and the Asia Pacific Journal of Human Resource Management (McDonnell, Collings, & Burgess, in press) and books such as Global Talent Management by Scullion and Collings (2011), Strategy-Driven Talent Management (Silzer & Dowell, 2010) and Talent Management of Knowledge Employees (Vaiman, 2010) were published. The major

^{*} Corresponding author at: Rutgers University, 94 Rockafeller Rd; Piscataway, NJ 08854, Switzerland. Tel.: +1 732 445 5827.

sjackson@smlr.rutgers.edu (S.E. Jackson), itarique@pace.edu (I. Tarique). ¹ Tel.: +1 732 445 4447.

² Tel.: +1 212 618 6583.

^{1090-9516/\$ –} see front matter \circledcirc 2010 Elsevier Inc. All rights reserved. doi:10.1016/j.jwb.2010.10.011

focus of these works was on corporations obtaining and managing a sufficient number of highly talented individuals (also known as "valuable contributors" including high level executives, those with high managerial potential, and those with rare technical skills) to deal with the challenge of the global talent shortage (Beechler & Woodward, 2009; Guthridge et al., 2008).

While the global talent shortage remains a significant human resource talent challenge for global firms, equally significant global talent challenges have emerged. These include those associated with the need to: (a) reduce and remove talent in order to lower the costs of operations; (b) locate and relocate of operations around the world; and (c) obtain equally competent talent anywhere in the world at lower wages (Guthridge et al., 2008; Lohr, 2010). Collectively, these challenges have become significant because of their strategic value and impact to the success of global firms (Guthridge et al., 2008; Lohr, 2010). Because of their common association with global talent, they have come to be known as "global talent challenges (GTCs)." These deal with through human resource policies and practices that have their roots in global talent management. When these policies and practices are systematically focused on these global talent challenges, they can be referred to as "global talent management initiatives (GTMs)" (Schuler, Jackson, & Tarique, 2011). The traditional treatment of "global talent management" is being expanded here to encompass additional global talent challenges. This work is built upon the suggestions of Scullion and Collings (2011), Tarique and Schuler (2010), and is consistent with some of the work on the traditional discussion of GTM (Guthridge et al. (2008).

This article begins by describing these global talent challenges and global talent management, as well as by describing some of the events that have produced this expanded treatment of "global talent management." As such, some of our discussion reflects conditions that were present during recent economic and financial boom times (i.e., the years leading up to 2008), when worker shortages were a primary concern. Economic expansion is likely to return, so labor shortages are likely to be of continuing concern, particularly in the rapidly emerging economies, such as China, India and Brazil (Jorek, Gott, & Battat, 2009). Regardless of the size of the gap between the available and desired pool of talent globally, however, human resource location and relocation, and cost reduction through lower compensation levels are likely to become major global talent challenges over the next several years (The Economist, 2010a; The Economist, 2010a,b).

2. Global talent challenges and global talent management

In today's rapidly moving, extremely uncertain, and highly competitive global environment, firms worldwide are encountering numerous global talent challenges. Global talent challenges are significant (strategic and high impact) HR-embedded business issues that focus on managing a firm to ensure just the right amount of the right talent and motivation, at the right place, at the right price, during all economic and financial ups and downs in a very competitive world for the purposes of balancing the workforce with the needs of the firm in the short term, and positioning the firm to have the workforce needed in the long term (Schuler et al., 2011). Global talent challenges emerge in the context of a dynamic environment. Among the many factors that shape the specific challenges and responses of particular firms are: (a) globalization, (b) changing demographics, (c) demand for workers with needed competencies and motivation, and (d) the supply of those needed competencies and motivation (Beechler & Woodward, 2009; Scullion & Collings, 2011). To provide support for the emergence of the global talent challenges presented, we describe these forces and shapers in more detail in the following paragraphs.

To successfully address global talent challenges, firms can and must take advantage of a wide variety of HR policies and practices (and an expanded number from those associated with the traditional approach to GTM (Scullion & Collings, 2011)). Conceptualized broadly, global talent management refers to the systematic use of specific HR policies and practices to manage the several global talent challenges that a firm confronts. These include specific aspects of HR policies and practices related to location and relocation management, planning and forecasting, staffing (to include attracting, selecting, retaining, reducing and removing), training and developing, and evaluating employees consistent with a firm's strategic directions while taking into account the evolving concerns of the workforce and regulatory requirements.

3. Major forces and shapers of the global talent challenges

In the discussion and conceptualization of global talent challenges, context is extremely important. Fig. 1 depicts the framework of the major contextual forces and shapers of GTCs and several HR policies and practices used in crafting global management talent initiatives to manage global talent challenges. We propose that an understanding of the realities and trends of these contextual forces and shapers is essential to identifying the GTCs and crafting the appropriate GTM initiatives. Thus we want to initiate that understanding here and identify sources of information that can be used to stay informed of the new realities and trends.

3.1. Globalization: world trade/wage differentials, competition, customers/markets, individuals

Globalization is a concept that people use when referring to many different phenomena. Of particular relevance to our discussion are: expansion of world trade, intensified competition among firms, the potential to reach many more customers around the world, and the array of individuals worldwide who now comprise a global labor market.

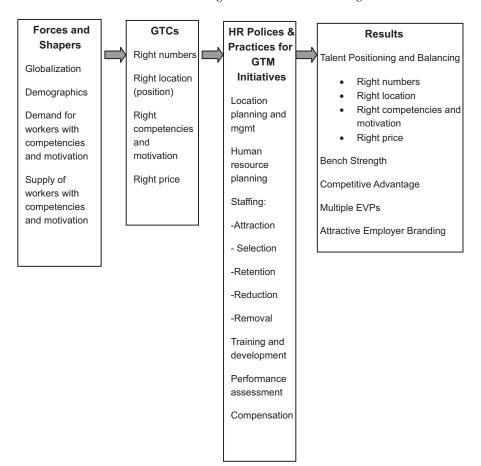
3.1.1. World trade/wage differentials

The value of world trade expanded from \$89 billion in 1953 to more than \$10 trillion in 2008 (UNCTAD, 2008). Although there was an economic contraction in 2009 it appears that the value of world trade is returning and that it may reach \$27 trillion by 2030. Foreign direct investment (FDI) went from \$59 billion in 1982 to more than \$1 trillion in 2008 (UNCTAD, 2008). The formal labor market expanded from 2 billion workers in 1990 to more than 3.5 billion in 2008 (U.S. Department of Labor, 2010). The global economy (global GDP) is projected to expand to \$75 trillion by 2030, up from \$10 trillion in 1970 and \$40 trillion in 2008 (A.T. Kearney, 2008; Stephenson & Pandit, 2008).

While FDI and trade are expected to increase, wage differentials are likely to continue across nations (U.S. Department of Labor, 2010). Even though wages are increasing slightly in India and China, workers in the developed economies are likely to continue to enjoy salaries that are substantially greater than those in developing countries in Asia, Eastern Europe and Latin America (Barboza, 2010; Bradsher & Barboza, 2010). These differentials, as much as ten to one, along with the desire to produce products that satisfy domestic market growth, are likely to further the decision by firms to locate operations in the developing economies (Galvin et al., 2010; Tabuchi, 2010; Timmons, 2010; Bradsher, 2010).

3.1.2. Competition

Competition is intense and multifaceted: it is fast developing, complex, extremely widespread. It is also subject to the current global economic and financial crises (Carins & Sliwa, 2008; Hill,



Framework for Global Talent Challenges and Global Talent Management Initiatives

Fig. 1. Framework for global talent challenges and global talent management initiatives.

2007; IBM, 2008; The Economist, 2009d). Global competition has forced many firms (e.g., P&G, IBM, and Infosys) to improve quality and strive for innovation (often based on rapidly developed and more sophisticated technology). Increasingly, global competition means that enhanced quality and innovation must be achieved while also keeping cost low (The Economist, 2010a; The Economist, 2010b; Timmons, 2010). At the same time the U.S. appears to keep falling behind in rate of change in innovation capacity. In 2009 the Information Technology and Innovation Foundation's Atlantic Century report ranked the U.S. last in innovation improvements (Ezell, 2009). Meanwhile, developing economies are constantly seeking to expand the scope of their operations, and with quality and low cost, they are proving to be a real threat to developed economies (Ezell, 2009; Timmons, 2010). For example, India's pharmaceutical industry has been growing at around 12% yearly and it is estimated that the costs of drug discovery are as much as ten times cheaper in India than in the developed economies (Timmons, 2010).

Small and larger firms in almost every country are being forced to adapt and quickly respond as they compete with firms worldwide to gain and sustain global competitive advantage (Engardino & Weubtraub, 2008; Gupta & Govindarajan, 2001; IBM, 2008; Lohr, 2010; Palmisano, 2007; Porter, 1985; Schuler & Tarique, 2007; Stephenson & Pandit, 2008; The Economist, 2009d). Competition within and across nations has also resulted in increased compensation demands from local workers, as well as for workers who enjoy the benefits of being in a global labor market (Bradsher & Barboza, 2010).

3.1.3. Customers/markets

Customers in virtually all industries and all economies are demanding more features and product reliability, and often at a lower price. The telecom industry is migrating rapidly from traditional fixed-line phone service to mobile, smart phones. Companies like BT (British Telecom) and Apple are selling "experiences" more than smart phone "hardware." Customers are demanding innovation and BT and Apple are responding by focusing on services and providing a social networking capability (Werdigier, 2008). This applies to customers the world over, with some differences reflecting unique characteristics of the countries (Zakaria, 2008). For many companies today, it is important to think and act global (Dickmann & Baruch, 2011; IBM, 2008; Mendenhall, Osland, Bird, Oddou, & Mazevski, 2008), which includes being where the customers are. Increasingly companies like Nokia, IBM, Tata, Caterpillar, and BT find that the growing customer base is in the BRIC countries (Brazil, Russia, India, and China) and in emerging economies throughout Asia, Latin America, and Eastern Europe (The Economist, 2010a,b).

3.1.4. Individuals

Individuals have been entering into the labor market in increased numbers over the past fifteen years (Goldstone, 2010; Zakaria, 2008). It has been estimated that more than 1.5 billion people have entered the global labor market during the past fifteen years and that another one billion will enter over the next ten years. Friedman (2005) argued that the development and spread of inexpensive technologies has flattened the world and facilitated

the entry of all these workers into the workforce. One major consequence of both these trends is the ability of firms to employ workers in the developing economies of the world at much lower wages than is possible in the developed economies of the world. Weekly wages in the developed economies are equivalent to monthly and even yearly wages in developing economies (Gomez-Mejia & Werner, 2008; U.S. Department of Labor, 2010). The movement of work to an array of dispersed locations that may include both developed and developing economies is most likely to succeed when all employees have the needed the competencies and motivations to do the work, when the work of dispersed employees is effectively coordinated, and when a firm's HR policies and practices are consistent with the full array of relevant employment regulations in every location (Hill, 2007; Palmisano, 2007; Porter, 1985; World Bank, 2008).

3.2. Demographics

Worldwide demographics are another major forces and shaper of global talent challenges. In North America, Western Europe, Japan and Australia, the age of retirement is being ushered in by the Baby Boomer generation (Adecco, 2008). While this may be a relatively short term phenomenon in North America (due to current birth and immigration rates), population shrinkage is a longer term event in Western Europe and Japan (Strack, Baier, & Fahlander, 2008). The long term-term outlook is revealing: by 2025 the number of people aged 15-64 is projected to fall by 7% in Germany, 9% in Italy and 14% in Japan (Goldstone, 2010; The Economist, 2006; The Economist, 2010a; Wooldridge, 2007). While the populations of many developed economies are aging and shrinking in size, the populations of developing and emerging economies are expanding and getting younger (Strack et al., 2008). There are major variations in demographic characteristics by age and by region that multinational firms need to know and consider in locating and relocating their operations internationally (Goldstone, 2010; Jorek et al., 2009).

3.3. Demand for workers with competencies and motivation

New jobs are still being created that require higher levels of technical competencies. For existing jobs, there is a growing need for employees who are willing to do the job under new and changing conditions that require the development of additional competencies (Rich, 2010). For skilled jobs, for example, there is a need for increased competencies to operate more sophisticated machinery, to interact with more demanding customers and to use more advanced technology to perform the functions of the traditional skilled jobs (Cummings et al., 2010; National Commission on Adult Literacy, 2008). It appears that these increased competencies are being associated with almost all jobs traditionally performed in multinational firms around the world today (Grove, 2010; Price & Turnbull, 2007).

In addition to the increased need for basic skills and advanced skill levels for basic entry-level, frontline and skilled jobs, there are a rising number of jobs that involve "knowledge work." There is increasing demand for so-called "knowledge workers"(Grove, 2010). Knowledge workers include managers, leaders, technicians, researchers, accountants, information specialists, consultants, medical and pharmaceutical professionals. In multinational firms, knowledge workers often work together in teams that cross cultural and geographic borders: "In the 21st century knowledge are considered the *raison d'etre* of multinational firms" (Brannen, 2008). "The growing need for talented managers in China represents by far the biggest management challenge facing multinationals and locally owned businesses alike" (Lane &

Pollner, 2008). Even if demand for managers and other knowledge workers has slowed recently, the need for highly- talented knowledge workers, especially in developing economies where wages are still lower, is likely to remain strong well into the future (Grove, 2010; Makinen, 2010a; Makinen, 2010b; Roach, 2009).

The need for highly motivated employees is likely to remain strong as well. Motivated employees are those who are willing to be dedicated to working with focus and energy, and be highly productive (Timmons, 2010). Highly motivated or highly engaged employees, through their high levels of productivity, are able to contribute far more to the firm than those who are less motivated. Recent evidence suggests that perhaps only a minority of individuals are highly motivated (McKinsey, 2009). According to that McKinsey global study respondents indicated that only 29% of employees were "highly" motivated, while 62% were "moderately" motivated.

3.4. Supply of workers with competencies and motivation

In developed economies, such as North America, Western Europe and Japan, there also is an expected shortage of managerial competencies especially as the economy recovers. According to a report from the U.S. National Commission on Adult Literacy (2008), between 80 and 90 million American adults do not have the basic communication (also called people or "soft") skills to function well in the global economy or to earn family-sustaining wages. Alone among other advanced industrial countries, American 25-35-year olds are not as well educated as their parents (U.S. National Commission on Adult Literacy, 2008). The Program for International Student Assessment reported that among the 30 OECD nations using measure of applied learning and problem-solving ability, the US students ranked 24th (McKinsey, 2009). The lack of technical knowledge workers continues to drive companies, such as Microsoft, Cisco and Wipro, to plead with the U.S. Congress to expand the number of H-1B visa permits granted each year (Herbst, 2009; Preston, 2008; Wadhwa, 2009).

Today the situation related to worker "shortages" is substantially different from the late 1990s–2008 period of time when "global talent management" became popular (The Economist, 2009a). Since the late 2008 firms have reduced their workforces because of a talent surplus. So, while the shortages described are likely to re-appear, in the near term, firms may find that there is a continued surplus of workers, at all levels of competency and motivation, worldwide. Competition among workers and countries is likely to result in more wage competition and more governmental support to encourage firms to bring jobs to their country (Bradsher, 2010; McKinsey, 2009).

Proposition 1. The success of firms today is dependent on how effectively they identify and manage the many global talent challenges they confront, and adapt to them as they evolve and develop.

Proposition 2. In order to capture the strategic opportunities offered by the many global talent challenges facing firms today, in-depth knowledge and understanding of the major environmental forces and shapers of them is essential.

3.5. Global talent challenges and global talent management: summary

These major forces and shapers pose several global talent challenges that firms need to manage as effectively as possible, including:

 too little talent (with the desired competency and motivation)is available (shortage)

- too much talent (with the desired competency and motivation) is available (surplus)
- the talent (with the desired competency and motivation) is available in the wrong place (or position)
- the talent (with the desired competency and motivation) is available at the wrong price (too expensive)

As a consequence of such conditions, firms may need to: (a) reduce/add workers and positions in their home country; (b) move to another country and establish new operations at lower cost levels and/or outsource existing operations; or (c) reduce/add workers even in other countries. In addition, firms may need to train and develop existing staff rather than hire new staff from the outside. They may also, on a regular basis, need to improve their training and development, performance management and compensation systems to ensure that the workers they have are as motivated and productive as they can be. Many firms, such as Novartis, IBM, LG, Asada, HSBC, Tesco and Google, as a part of their "global talent management" programs (e.g. see Gakovic & Yardley, 2007; Siegel, 2008) have instituted such programs.

Proposition 3. Firms need to systematically select from the many HR policies and practices in order to: (a) manage through the current environment of economic and financial crises; (b) position themselves for the period of recovery after the crises; and (c) operate more competitively on a day-to-day basis in a highly competitive world.

Proposition 4. Systematically selected and coordinated HR policies and practices taken to address these global talent challenges can enable a multinational firm to gain and sustain a global competitive advantage. This is the essence of global talent management.

4. HR policies and practices for GTM initiatives to address global talent challenges

Due in part to the existence of many forces and shapers of the global talent challenges, there are many possible HR policies and practices that firms can use in their global talent management initiatives (Beechler & Woodward, 2009). Matching an accurate diagnosis of a firm's strategy and talent management situation with possible HR policies and practices is a first step in gaining and sustaining a global competitive advantage that may result from the successful implementation of the appropriate HR policies and practices (Rioux, Bernthal, & Wellins, 2009; Strack et al., 2009). Specific aspects of some HR policies and practices that can be systematically selected and coordinated by multinational firms in their global talent management initiatives include:

- Location planning and relocation management
- HR planning and forecasting
- Staffing
 - Attraction and selection
 - Retention
 - Reduction, and
 - Removal
- Training and development
- Performance assessment, and
- Compensation

While these HR policies and practices are described separately, GTM initiatives for most GTCs they are likely to be combined or "packaged" for maximum effectiveness. Systematic selection of the specific HR policies and practices in those packages will reflect the type of global talent challenge. We present some examples of HR policies and practices that have been and can be used to deal with some of the GTCs. These examples are meant to be illustrative, and are by no means exhaustive and thorough.

4.1. Location planning and relocation management

While relatively new areas of inquiry in the field of international human resource management, the actions associated with location planning and relocation management are salient. In location and relocation management decisions, firms must also consider other factors such as taxes, infrastructure, currency fluctuations, government incentives, political stability, culture, construction costs, competitors, suppliers, customers and energy/ water supplies. Human resource management concerns, however, are also vital (Friedman, 2010; Grove, 2010; Porter, 1990; Timmons, 2010). Consequently international human resource management is appropriately placed now to extend its linkage with the strategy and directions of the firm.

Multinational firms have been rapidly expanding and relocating around the world (Daniels, Radebaugh, & Sullivan, 2007; Ewing, 2008; Hill, 2007; Porter, 1985). In a period of just past three years, IBM hired more than 90,000 people in Brazil, China and India (Hamm, 2008; Lohr, 2010). Firms, such as IBM, Intel, Dell, are moving to India. India is a country with its seemingly unlimited skilled labor supply was nearly fully employed by 2008. Companies thinking about moving operations to India need to develop talent management strategies in order to attract workers away from their existing employers, and then retain these same individuals. As the available supply of workers shrinks, decisions must be made about whether to locate elsewhere or perhaps develop training programs to train for the competencies that are needed, as Microsoft has done in China and Nokia did in Romania (Chen & Hoskin, 2007; McGregor & Hamm, 2008). To help ensure a supply of dependable and competent labor at the right price, when Chinese companies locate abroad, they also send many of their own employees (Miller, 2010; Wong, 2009). Of course firms are also moving operations abroad by outsourcing much of their production and assembly (Barboza, 2010; Bradsher, 2010; Grove, 2010). For example, some 250,000 of Foxconn's 800,000 employees produce iMacs, IPods and iPhones for Apple in China. Meanwhile Apple in the U.S. has only about 25,000 employees (Barboza, 2010; Grove, 2010). Wipro and Infosys in India do much of the back office work for many of the largest firms in the U.S. (Friedman, 2005).

Multinational firms that are now thinking of expanding or relocating operations, or deciding whether to outsource, confront a large number of questions that are the essence of location planning and relocation management, including:

- Why go? Why move at all from where we are right now? Should we rather just outsource part of our existing operations, or offshore part of our existing operations?
- Where go? What locations should we move to? Have we done country assessments on the country locations on such issues as: compensation levels, workforce skills availability, employment legislation, and culture compatibility?
- How go? Shall we expand our operations by ourselves? Should we outsource some of our existing operations to others? Should enter into a joint venture with a local partner? Should we use a merger or acquisition?
- When go? Do we need to go within a year? Do we have time to develop an image in a new country that will enable us to attract the best applicants (i.e., be perceived as "One of the Best Companies to Work for"?). If we enter another country, will we need to develop new ways of manage the workforce? Will we have to change our practices of recruiting and training, for example, for the local employees? Will want to create a common set of HR policies and practices for all our locations?
- How link? How do we link employees in multiple international locations with each other so as to gain efficiencies and transfer knowledge effectively?

4.2. Human resource planning

Besides addressing these questions associated with location and relocation management, multinational firms will likely need to also engage in more traditional human resource planning and forecasting. That is, making estimates of the numbers of individuals and skills that will be needed in their various locations, using existing attrition and retirement data of the current employees in conjunction with the business plans of the firm. Of course, even traditional planning tools may benefit from modifications that take into account the fact that the past is not always a good predictor of the future, especially in these more uncertain and dynamic times (Cappelli, 2008).

Under conditions of great uncertainty, "scenario planning" might be more prudent that the use of more traditional forecasting techniques (e.g., judgmental and statistical forecasts) (Courtney, 2008; Dye et al., 2009; The Economist, 2009b). Informing the creation of various scenarios can be the information about the four sets of drivers and shapers in the environment shown in Fig. 1. This information can be vital in constructing scenarios relevant for the strategic directions and needs of the firm, thus human resource planning based on these same scenarios can be instrumental in aligning global talent management initiatives with the firm. Knowledge of these scenarios can also assist in making these human resource planning more proactive and anticipatory, and thus helping make the firm more prepared for the variety of scenarios the firm may confront.

4.3. Staffing

4.3.1. Attraction and selection

Organizations are finding that they are having a challenging time finding the workers with the competencies they need to perform a wide variety of jobs at the wage rates offered, regardless of worldwide location (Huselid, Beatty, & Becker, 2009)). Workers at every level are more important than ever to multinationals that hope to be competitive, both globally and locally (Guthridge et al., 2008; Huselid et al., 2009). As a consequence. Firms have to make themselves more attractive. In doing so they are finding that they differentiate the pool of potential applicants and construct different approaches to making themselves attractive. In other words, they need to develop different "employee value propositions" (EVPs). Guthridge et al. (2008) present various EVPs developed by companies such as Tesco in the UK. For example, the UK retailer Tesco develops separate recruiting and selection tactics for applicants for frontline clerks depending upon whether they are straight from school, are part-time or graduates wanting full-time work. There is a separate website whose materials and language are tailored to that group. Tactics used for different groups are based on what the firm will be most effective and valued by the applicants, not on the firm's view that some applicants are more valuable than others (Beechler & Woodward, 2009). Of course firms can also utilize a strategy involving mergers and/or acquisitions to facilitate and enhance the identification and acquisition of key talent. This strategy can also reduce the need for the firm to provide training and development programs in order to develop the competencies needed from the key talent (Goedhart, Koller, & Wessels, 2010).

4.3.2. Retention

Retaining talent is one of the biggest talent management challenges for global accountancy firms. Historically, annual turnover rates at these firms have been between 15 and 20 percent. In these global accountancy firms (e.g., Deloitte, Ernst & Young) a variety of factors contribute to high turnover rates among early-career employees, including long hours, pressure to study during off-hours in order to pass professional certification exams, and an "up or out" partnership model. Jim Wall, the managing director of human resources at Deloitte, estimated that every percentage-point drop in annual turnover rates equated to a savings of \$400-\$500 million for the firm (The Economist, 2007). To stem the turnover tide among early-career accountants, some firms have attempted to increase long-term commitment by providing data to employees. Employees who stay at least six years with their first employer are likely to earn higher pay at other firms when they do eventually leave (The Economist, 2007). Effective are retention strategies include characteristics are: (a) top management making a strong commitment that talent management is a priority for all employees; (b) assessing the efficacy of current recruiting sources; (c) expanding the list of recruiting sources; (d) sourcing talent globally; (e) constantly monitoring labor markets worldwide; (f) establishing diversity programs; (g) establishing accountability amongst managers for retention goals; and (h) rewarding managers for improving talent retention (Caye & Marten, 2008; Guthridge & Komm, 2008; Holland, 2008).

4.3.3. *Reduction and removal*

If global economic and financial conditions continue to deteriorate, unemployment will likely spread dramatically (Powell, 2009; The Economist, 2009c; The Economist, 2009d). The International Labor Organization (ILO) estimated that more than 50 million jobs were lost globally in 2009, and perhaps again in 2010. Because hiring usually lags behind economic recovery, low employment levels were expected to persist until at least 2012. Thus challenge of managing under conditions of surplus talent is likely to be with us for the next few years. Accordingly, "reduction and removal" are likely to dominate the global talent management agenda of many firms.

Reduction can involve the reduction of work hours, days, overtime, pay levels, pay increases, benefits, new hires and holidays, and also the increased use of attrition, unpaid leave, assignment for local volunteer work, sabbaticals, and contract employees and outsourcing (Boyle, 2009; Mirza, 2008). From these activities firms can reduce their costs and existing employees can retain their jobs. In contrast, *removal* refers to the use of layoffs or other measures that result in permanent job loss (Hansen, 2009). Firms have a great deal of choice in how they shrink their workforces, but their choices are not unlimited. For multinationals, decisions about which HR actions to use must reflect the concerns of various unions, governmental regulations, cultural norms and corporate values (Bloom & Reenen, 2010; Rioux et al., 2009).

4.3.4. Degree of inclusion in staffing

Two philosophically distinct approaches in staffing talent are evident in the current literature. One approach assumes that some of a firm's employees are more valuable than others. Huselid et al. (2009) capture this approach with the use of alpha terminology, e.g., Type "A" players, Type "B" players, and Type "C" players. They also assign these same letters to the positions in the firm. For positions, "A" indicates the most significant impact on the firm's strategy and its key constituencies and positions that offer the greatest variability in performance. For players (the employees), "A" indicates those employees who perform at the highest level of performance variability and offer the highest level of impact. The result of this categorization is that firms then would devote the most, but certainly not all, of their resources in their global talent management efforts to "A"-"A" combinations.

In contrast to what Huselid et al. (2009) refer to as their "differentiated workforce approach," companies like the UK insurer Aviva and the UK grocer Tesco have developed global talent management initiatives that focus on managing the "vital many" rather than risk alienating the bulk of its workforce by focusing exclusively on highfliers" (the "A"-"A" combinations). Both Tesco and Aviva act on the premise that all employees in their companies are vital to the success of their businesses. Consequently, all employees deserved to be and need to be recognized and offered development opportunities. In both companies, talent management initiatives are created for all categories of employees, from top management to the front-line employees (Guthridge et al., 2008).

Although we have presented these two competing philosophies as if firms must choose one or the other, this is perhaps overly simplistic. Indeed, a better approach to thinking about who is included as "talent" may to recognize firms vary in their degree of inclusiveness, going from including everyone (high inclusiveness) to only the top 5% or so (low inclusiveness). This application of inclusiveness applies equally to training and development, performance assessment and compensation.

4.4. Training and development

In locations where competencies fall short of what firms need, training and development programs can be used to improve the quality of talent available and at the same time increase a firm's appeal as an employer. In China, Microsoft uses development and recognition programs that appeal to first time programmers. Development programs include a rotation to the U.S. and recognition programs include being selected as a "Silk Road Scholar." This program, analogous in higher education to being designated a "Rhodes Scholar," is named after the famous travel route that connected Europe to China and made famous by the trading of Marco Polo in the thirteenth century (Chen & Hoskin, 2007).

Multinational firms like Microsoft and Schlumberger also offer attractive career management opportunities. Schlumberger makes it possible for engineers to achieve recognition and compensation equivalent to managers while remaining on their engineering career track (Schlumberger, 2007; Schlumberger, 2008; Schlumberger, 2009). Applying this more broadly, multinational firms can be expected to emphasize internal markets even more (allowing employees to move around from job to job more freely), with rapid promotion for the superstars (Dickmann & Baruch, 2011; Scullion & Collings, 2011; Wooldridge, 2007).

To address the need for leaders and managers with a global mindset that is broader than knowledge about the details of local country operations, many Chinese companies (e.g., Haier, Huawei, TCL) have begun sending their best managers to intensive management-training programs, such as those offered through a corporate university or business school. Others have filled the capability gap by looking for employees outside China. For example, Lenovo hired an American from Dell to lead the company where already 70% of its top managers are not Chinese nationals (Dietz et al., 2008).

4.5. Performance assessment

Performance assessment can be a key ingredient in successful global talent management initiatives, especially to retain and motivate existing employees (Varma, Budhwar, & DeNisi, 2008). For example, the performance assessment system at Novartis (which is similar to many firms such as GE in the US and LG in Korea) is central to its global talent management initiatives (Siegel, 2008). At the heart of it is a system that grades employees on (a) business results (the "what") and (b) values and behaviors (the "how"). While the business results are unique to each business area, the values and behaviors (e.g., being innovative and creative; exercising leadership) are common across the entire firm. Combining these two performance dimensions results in a ninebox matrix for assessing employee performance. This assessment process takes place within the context of the business performance

cycle, which begins with the strategic plan for the firm and cascades down to define "what" each business unit is expected to accomplish. Novartis employees receive quarterly performance feedback, participate in self-assessments, engage in development planning and career discussions. Together, these practices are aimed at improving competencies, motivating talent, determining training needs and establishing a basis for performance-based pay (Siegel, 2008). Of course, not everything that is planned gets implemented and not everything that gets implemented is done correctly, in part due to such phenomena as the "knowing-doing gap" (Beechler & Woodward, 2009; Pfeffer & Sutton, 2006).

4.6. Compensation

Compensation rates around the world reflect today's dynamic economic and competitive business conditions, in some cases as much as they do of local conditions (Bryan, 2010; Gomez-Mejia & Werner, 2008; U.S. Department of Labor, 2010). In response to multinationals locating in their countries, local companies in China and India often must pay Western-level salaries to their highvalued contributors for whom the labor market is global (Banai & Harry, 2005; Bryan, 2010; Wooldridge, 2007).

Demands for compensation and benefit increases have become popular in the Japanese auto factories of Nissan, Honda and Toyota in China (Barboza, 2010; Bradsher & Barboza, 2010; Tabuchi, 2010). Demands for compensation increases by local workers in China have also caused some multinationals (e.g., FedEx, TNT, and HSBC) to move and/or consider moving operations to Vietnam and Bangladesh. These firms need to keep some of their operations in China, producing what is often referred to as "China plus one strategy" (Bradsher, 2008). Demands for compensation and benefit increases have become popular in the Japanese auto factories of Nissan, Honda and Toyota in China (Barboza, 2010; Bradsher & Barboza, 2010).

At Novartis, pay-for- performance is an important component of their global talent management initiatives (Siegel, 2008). Using the results of an employee's performance assessment in the ninebox performance matrix, a bonus payout is calculated that recognizes both the individual's performance and the performance of their business unit. Because the market for employees in research and development is global, firms like Novartis set compensation rates at levels that reflect the global environment, even when that means paying salaries that are above the norm in some countries (Siegel, 2008). To help manage compensation costs, however, firms in this situation may locate their operations to second-tier (lower cost) cities (e.g., Sichuan, Qinghai and Hunan). Another tactic is to recruit talent that is currently under-employed (e.g., engineers who are temporarily working as taxi drivers because they have lost their jobs during the economic downturn).

4.7. Linking GTM initiatives to GTCs

In general, as this brief description of possible GTM initiatives suggests, multinational firms have many possible HR policies and practices to utilize in confronting a variety of GTCs, or significant HR-embedded business issues that focus on managing a firm to ensure just the right amount of the right talent and motivation, at the right place, at the right price, during all economic and financial ups and downs in a very competitive world for the purposes of balancing the workforce with the needs of the firm in the short term and positioning the firm to have the workforce needed in the long term.

Ideally, the GTM initiatives they select reflect both the specific GTC facing the firm currently and consideration of the future challenges that are likely to arise as economic conditions change over time. Although the recent economic downturn has slowed business globally, firms still need to hire and manage their talent in

anticipation of their future needs. Furthermore, the selection of appropriate HR policies and practices is likely to be most effective in firms that adopt a systematic approach in crafting global talent management initiatives. A general guideline in this process might be the matrix of possible GTM initiatives and GTCs shown in Fig. 2.

In addition, HR policies and practices need to mutually supportive and internally consistent with each other. These also need to fit the specific GTC and firm characteristics, such as top management leadership, vision, values, strategy, size, culture and industry (Beechler & Woodward, 2009; Bloom & Reenen, 2010; Rioux et al., 2009; Scullion & Collings, 2011). More specifically, then, we would expect that firms, in their selection of the HR policies and practices to use would:

- First, identify the specific global talent challenge or challenges that are confronting them.
- Secondly, evaluate their level of rigor, sophistication and preparedness regarding each of the HR policies and practices suggested in Fig. 2 for the challenge or challenges identified.
- Thirdly, determine firm characteristics such as top management leadership and values that are likely to be more supportive of certain HR policies and practices than others (for most of the GTCs there are several that can be used, so short of using them all, use the ones that are most likely to be consistent with the firm's characteristics).
- Fourth, continually monitor the drivers and shapers of the firm's global talent challenges, making determinations as to the most appropriate HR policies and practices to select, and facilitating the changes needed to implement them.

Proposition 5. Identification of a firm's GTCs is the basis for the systematic composition of the appropriate HR policies and practices that will enable the firm to be successful in managing its global talent challenges.

Proposition 6. The appropriateness of HR policies and practices depends on the nature of the GTCs and on numerous characteristics of the firm.

5. Role of HR professionals

In a classic study entitled The War for Talent (Michaels et al., 2001), it was found that HR professionals spent a great deal of their time formulating and managing the HR policies and practices, such as recruiting, selecting, training, performance appraisal and compensation in a more traditional, administrative manner. While this can be important in managing human resources generally, their effectiveness in managing global talent management initiatives results from being linked with the firm's strategies and directions and with the firm's talent strategy. "HR underperforms in companies where its capabilities, competencies, and focus are not tightly aligned with the critical business priorities" (Rawlinson, McFarland, & Post, 2008: p. 23; see also Michaels et al., 2001; Guthridge et al., 2008). Thus HR professionals contribute more when the HR policies and practices are closely aligned with the firm through a thorough understanding of the strategy and direction of the firm.

In addition to this strategic understanding of the firm, the follow-up study to the Michaels et al., Study (2001) concluded that most HR professionals can make a better contribution in a firm's global talent management initiatives by measuring the impact of HR policies and practices using metrics that are aligned with business strategies: "Only HR can translate a business strategy into a detailed talent strategy: for instance, how many people does the company need in order to execute its business strategy, where does it need them, and what skills should they have" (Guthridge et al., 2008). Thus, for example, a firm might track the performance records of employees who have participated in global management training programs and compare them to those who have developed global skills on the job and/or compare them to people with no global exposure. Performance metrics that reflect desired strategic business outcomes may include revenue, profit targets or retention of direct reports (Farndale, Scullion, & Sparrow, 2010; Huselid et al., 2009).

Proposition 7. *HR Professionals need to know the strategic needs and directions of the firm and the important characteristics of the firm in order to craft a talent strategy, i.e., a strategy that identifies the firm in interval.*

	Shortage of Talent	Surplus of Talent	Talent at the Wrong Place	Talent is at the Wrong Price
HR Location and Relocation Management	•		•	•
HR Planning			•	•
Attraction/Selection	•			
Retention	•			
Reduction/Removal		•	•	
Training and Development				
Performance Assessment		•	•	
Compensation	•	•		•

Indicated Have the Most Potential Application (with Adjustment for Firm Characteristics)

Fig. 2. Linking HR policies and practices with global talent challenges: those indicated have the most potential application (with adjustment for firm characteristics).

important global talent challenges and identifies the global talent management initiatives that will effectively manage them.

6. Results of effective HR policies and practices for GTM initiatives

As shown in Fig. 1, there are several potential results that are likely to follow from HR policies and practices of GTM initiatives that successfully address a firm's global talent challenges. In particular, we have argued that addressing the global talent challenges improves the firm's success in having the right people at the right place at the right time with the needed competencies and motivation and at the right price at all levels and all locations (positions) of the firms (Guthridge et al., 2008; Lane & Pollner, 2008). In time, these effects accumulate and deepen the firm's bench strength (or future positioning) for all positions the company, both anticipated and unanticipated, in all current and future locations around the world (Rawlinson et al., 2008). Also resulting are a variety of employee value propositions (EVPs) and an attractive employer brand image.

In the short term, successful GTM initiatives may provide a firm with a temporary advantage over competitors. In the long term, as the firm's global talent management capabilities develop and as learning about how to management global talent becomes embedded in organizational systems, it may be possible for the firm to establish a sustainable global competitive advantage. Sustainability of competitive advantage is never assured, because the forces and shapers of global talent challenges are likely to change as are the specific GTCs (Daniels et al., 2007; Porter, 1985). Nevertheless, as firms gain experience and begin to develop the competencies needed for global success, they simultaneously position themselves to adapt as changing conditions require in the future.

Proposition 8. Firms that successfully develop and institutionalize their global talent management capabilities position themselves to attain many results in several aspects of talent positioning and balancing, bench strength, global competitive advantage, multiple EVPs and an attractive employer brand.

7. Barriers to global talent management initiatives

It seems apparent that multinational firms have good reason to invest considerable resources in meeting the global talent challenges they face. The success in this endeavor, however, remains elusive. Based on the responses of more than 1300 executives worldwide, Guthridge et al. (2008) identified several barriers to the use of HR policies and practices for global talent management initiatives. Many of these barriers to successful GTM initiatives exist for domestic firms, but they become more complex and difficult to overcome in global firms. The barriers include:

- The fact that senior managers do not spend enough time on talent management, perhaps thinking that there are other more pressing things (e.g., finance, market share, product attributes) to be concerned with;
- Organizational structures, whether based regions, products, or functions, that inhibit collaboration and the sharing of resources across boundaries;
- Middle and front line managers who are not sufficiently involved in or responsible for employees' careers, perhaps because they see these activities as less important than managing the business, and/ or because they require such a long-term perspective;
- Managers are uncomfortable and/or unwilling to acknowledge performance differences among employees—a step that is required in order to take actions to improve performance;

- Managers at all levels who are not sufficiently involved in the formulation of the firm's talent management strategy, and therefore, have a limited sense of ownership and understanding of actions designed to help manage the firm's global talent;
- HR departments that lack the competencies needed to address the global talent challenges effectively, and/or lack the respect of other executives whose cooperation is needed to implement appropriate HR policies and practices; and
- There exists a "knowledge-doing" gap that prevents from managers implementing actions, even though they might know that they are the right things to do (Pfeffer & Sutton, 2006).

While there are many barriers to overcome, multinational firms such as IBM, HSBC, P&G, Novartis, ThyssenKrupp, and Schlumberger have shown that success is possible with the commitment, leadership and involvement of the top management (Farndale et al., 2010; Lane & Pollner, 2008; Palmisano, 2007).

Proposition 9. Firms that successfully develop and institutionalize their global talent management capabilities must also be able to overcome the many barriers that exist in implementing their global talent management initiatives.

8. Managerial relevance

Many of the most pressing global challenges facing global firms today are directly associated with several significant global talent challenges. These global talent challenges arise due to the everchanging drivers and shapers in the environment. In particular, among the major drivers and shapers are: enhanced globalization, evolving demographics, the need for more competencies and motivation, and the growing shortage/surplus of needed competencies and motivation as depicted in Fig. 1. For firms throughout the world, the changing environment-particularly during volatile economic and financial periods of boom-and-bust such as those experienced in recent years-presents both global talent challenges and an opportunity to gain a sustainable global competitive advantage. In addition to gaining competitive advantage, firms may also be able to expand their bench strength, develop an attractive employer brand and create several attractive employee value propositions that will help attract and retain valued employees. More importantly, effective management of GTCs will enable firms to balance their talent needs for the short term and position their needs for the longer term. As firms move to identify their global talent challenges they face many choices. These need to be linked with the needs and directions of a firm's strategy and its talent strategy. A significant hurdle in doing this all effectively may simply be the need for firms to be relentless in their efforts to effectively manage global talent. When success is achieved in the short term, new HR policies and practices will soon be required simply to stay one step ahead of competitors. For the HR profession, an immediate challenge is to continually assess and to understand the forces and shapers that create global talent challenges, develop systems that are tailored to address a particular firm's specific global talent challenges, and work in partnership with the senior management team ensure a close linkage between HR policies and practices for GTM initiatives and the strategic objectives of the GTCs and the firm.

Acknowledgements

The authors wish to express thanks for preparatory comments and suggestions to Dave Collings, Paul Sparrow, Mark Saxer, Hugh Scullion, John Slocum, Ken Smith, Rosalie Tung and Nadia Wicki de la Puente. Supported by a grant from the School of Management and Labor Relations, Rutgers University. Based on our presentations at the 11th IHRM Conference, Aston Business School, June 10, 2010 and the Lancaster University Management School, June 4, 2010.

References

- Banai, M., & Harry, W. (2005). Transnational managers: A different expatriate experience. International Studies of Management and Organization, 34: 96–120.
- Barboza, D. (2010). Supply chain for iPhone highlights costs in China. The New York Times, July 5: B1.
- Beechler, S., & Woodward, I. C. (2009). Global talent management. Journal of International Management, 15: 273–285.
- Bloom, N., & Reenen, J. V. (2010). Why do management practices differ across firms and countries? Journal of Economic Perspectives, 24: 203–224.
- Boyle, M. (2009). Cutting costs without cutting jobs. Business Week, March 9: 55.
- Bradsher, K. (2008). Investors seek Asian options to costly china. The New York Times, June 18: A20.
- Bradsher, K. (2010). China drawing high-tech research from U.S.. The New York Times, March 17: B1.
- Bradsher, K., & Barboza, D. (2010). Strike in China highlights gap in workers' pay. The New York Times, May 28: B1.
- Brannen, M. (2008). Pressing concerns for Japanese talent management. Paper presented at the academy of management annual conference, 9–13 August.
- Bryan, L. (2010). Globalization's critical imbalances. *The McKinsey Quarterly, June*: 7–15. Cappelli, P. (2008). *Talent on demand*. Boston: Harvard Business School.
- Carins, G., & Sliwa, M. (2008). A very short, fairly interesting and reasonably cheap book about international business. London: Sage.
- Caye, J.-M., & Marten, I. (2008). Talent management. Boston: The Boston Consulting Group.
- Chambers, E. G., Foulon, M., Handfield-Jones, H., Hanklin, S. M., & Michaels, E. G. (1998). The war for talent. *The McKinsey Quarterly*, 3: 44–57.
- Chen, W., & Hoskin, J. (2007). Multinational corporations in China: Finding and keeping talent. SHRM, October: 1–4.
- Courtney, H. (2008). A fresh look at strategy under uncertainty: an interview. McKinsey Quarterly, December: 3–9.
- Cummings, J., Manyika, J., Mendonca, L., Greenberg, E., Aronowitz, S., Chopra, R., et al. (2010). Growth and competitiveness in the United States: The role of multinational companies. *McKinsey Global Institute Report*.
- Daniels, J. D., Radebaugh, L. H., & Sullivan, D. P. (2007). International business: Environment and operations. Upper Saddle River, NJ: Pearson/Prentice-Hall.
- Dickmann, M. & Baruch, Y. (2011) Global career management. London: Routledge.
- Dietz, M. C., Orr, G., & Xing, J. (2008). How Chinese companies can succeed abroad. McKinsey Quarterly May.
- Dye, R., Sibony, O., & Viguerie, S. P. (2009). Strategic planning: Three tips for 2009. The McKinsey Quarterly April.
- Engardino, P., & Weubtraub, A. (2008). Outsourcing the drug industry. Business Week, September 15: 49-53.
- Ewing, E. (2008). Nokia's new home in Romania. Business Week, January 28: 40-42.
- Ezell, S. (2009). America and the world: We're no. 40! *DemocracyJournal.org*, *Fall*: 12–19.
- Farndale, E., Scullion, H., & Sparrow, P. (2010). The role of the corporate HR function in global talent management. *Journal of World Business*, 46: 161–168.
- Friedman, T. L. (2005). *The world is flat*. New York: Farrar, Straus and Giroux.
- Friedman, T. L. (2010). A word from the wise. The New York Times, March 3: A22.
- Gakovic, A., & Yardley, K. (2007). Global talent management at HSBC. Organizational Development Journal, Summer: 6–14.
- Galvin, J., Hexter, J., & Hirt, M. (2010). Building a second home in China. McKinsey Quarterly, June: 1–16.
- Goedhart, M., Koller, T., & Wessels, D. (2010). The five types of successful acquisitions. McKinsey on Finance, July: 13–19.
- Goldstone, J. A. (2010). The new population bomb. Foreign Affairs, 89: 31-43.
- Gomez-Mejia, L., & Werner, S. (2008). Global compensation. London: Routledge.
- Grove, A. (2010). How to make an American job before it's too late. Bloomberg Business Week, July 1: 43–47.
- Gupta, A., & Govindarajan, V. (2001). Converting global presence into global competitive advantage. Academy of Management Executive, 15: 45–58.
- Guthridge, M., & Komm, A. B. (2008). Why multinationals struggle to manage talent. *The McKinsey Quarterly, May:* 1–5.
- Guthridge, M., Komm, A. B., & Lawson, E. (2008). Making talent management a strategic priority. *The McKinsey Quarterly, January*: 49–59.
- Hamm, S. (2008). International isn't just IBM's first name. Business Week, January 28: 40–41.
- Hansen, F. (2009). HR in the downturn. Workforce Management, February 16: 16.
- Herbst, M. (2009). A narrowing window for foreign workers? Business Week, March 16: 50.
- Hill, C. W. L. (2007). International business: Competing in the global marketplace (6e). New York: McGraw-Hill/Irwin.
- Holland, K. (2008). Working all corners in a global talent hunt. The New York Times, February 24: 17.
- Huselid, M. A., Beatty, R. W., & Becker, B. (2009). The differentiated workforce. Boston: Harvard Business School Press.
- IBM. (2008). The enterprise of the future. New York: IBM.

- Jorek, N., Gott, J., & Battat, M. (2009). The shifting geography of offshoring. Chicago: AT Kearney.
- Lane, K., & Pollner, F. (2008). How to address China's growing talent shortage. McKinsey Quarterly, 3: 33–40.
- Lohr, S. (2010). Global strategy stabilized I.B.M. during the downturn. The New York Times, April 20: D1-4.
- Makinen, J. (2010a). Designer gains foothold in China with a local partner's help. The New York Times, June 16: B4.
- Makinen, J. (2010b). A British fan manufacturer goes where its customers are. The New York Times, June 16: B4.
- McDonnell, A., Collings, D. & Burgess, J. (in press). Special Issue of the Asia Pacific Journal of Human Resource Management.
- McGregor, J., & Hamm, S. (2008). Managing the global workforce. Business Week, January 28: 36–51.
- Mendenhall, M. E., Osland, J. S., Bird, A., Oddou, G. R., & Mazevski, M. L. (2008). Global leadership: Research, practice and development. London: Routledge.
- Michaels, E., Handfield-Jones, H., & Axelrod, B. (2001). The war for talent. Boston: Harvard Business School Press.
- Miller, K. (2010). Coping with Chinese financial power. Foreign Affairs, July/August: 96– 109.
- Mirza, B. (2008). Look at alternatives to layoffs. SHRM On-line December 29.
- Palmisano, S. (2007). The globally integrated enterprise. Foreign Affairs, 85: 127-136. Pfeffer, J., & Sutton, R. (2006). Hard facts, dangerous half-truths, and total nonsense:
- profiting from evidence-based management. Boston: Harvard Business School Press. Porter, M. (1985). Competitive advantage: Creating and sustaining superior performance.
- New York: Free Press. Porter, M. (1990). The competitive advantage of nations. Boston: Harvard Business
- School Press. Powell, B. (2009). China's hard landing. Fortune, March 16: 114–120.
- Powell, B. (2009). Clilla's fiatu faituilig. Fortune, Murch 10. 114–120.
- Preston, J. (2008). Visa application period opens for highly skilled workers. *The New York Times, April 1*: A:5.
- Price, C. & Turnbull, D. (2007). The organizational challenges of global trends: A McKinsey global survey. December: 1–20.
- Rawlinson, R., McFarland, & Post, L. (2008). A talent for talent. Strategy+Business, Autumn: 21-24.
- Rich, M. (2010). Factory jobs return, but employers find skills shortage. The New York Times July 1.
- Rioux, S. M., Bernthal, P. R., & Wellins, R. S. (2009). The globalization of human resource practices. Special report for development dimensions international. Bridgeville, PA: DDI.
- Roach, S. (2009, February). Testimony before the Chinese American Committee on Economic and Security. Washington D.C. US Senate.
- Schlumberger Annual Reports (2007).
- Schlumberger Annual Reports (2008).
- Schlumberger Annual Reports (2009).
- Schuler, R. S., Jackson, S. E., & Tarique, I. (2011). Framework for global talent challenges: HR actions of global talent management. In Scullion, H. and Collings, D. (Eds) Global Talent Mangement. London: Routledge.
- Schuler, R. S., & Tarique, I. (2007). International HRM: A north america perspective, a thematic update and suggestions for future research. International Journal of Human Resource Management, 46: 15–43.
- Scullion, H., & Collings, D. (2011). Global Talent Management. London: Routledge.
- Scullion, H., Collings, D., & Caliguri, P. (2010). Special Issue Editors. Journal of World Business. 45: 105–196.
- Siegel, J. (2008). Global talent management at Novartis. Harvard Business School (Case #9: 708–486).
- Silzer, R., & Dowell, B. E. (2010). Strategy-Driven Talent Management. New York: Wiley. Stephenson, E., & Pandit, A. (2008). How companies act on global trends: A McKinsey
- global survey. Boston: McKinsey. Strack, R., Baier, J., & Fahlander, A. (2008). Managing demographic risk. Harvard Business
- Review, February: 2–11.
- Strack, R., Dyer, A., Caye, J-M., Minto, A., Leicht, M., Francoeur, F., et al. (2009). Creating competitive advantage: How to address HR challenges worldwide through 2015. BCG/World Federation of People Management Associations: Special Report: Boston.
- Tabuchi, H. (2010). Chinese Honda strike a wake-up call for Japan. The New York Times, June 1: B1.
- Tarique, I., & Schuler, R. S. (2010). Framework and review of global talent management and suggestions for future research. *Journal of World Business*, 45: 122–133.
- The Economist. (2006). The CEO's role in talent management: How top executives from ten countries are nurturing the leaders of tomorrow. *The Economist (London: The Economist Intelligence Unit)*.
- The Economist. (2007). Accounting for good people. The Economist, July 21: 68-70.
- The Economist. (2008a). Globalization 3.0. Boston: AT Kearney.
- The Economist. (2008b). The next decade's talent war. Geneva: Adecco.
- The Economist. (2008, June). Reach higher America: Overcoming crisis in the U.S. workforce. Washington, D.C. National Commission on Adult Literacy.
- The Economist. (2009a). When jobs disappear. The Economist, March 14: 71-73.
- The Economist. (2009b). Turning their backs on the world. *The Economist, February* 21: 59–61.
- The Economist. (2009c). Managing in a fog. The Economist, February 28: 67-68.
- The Economist. (2009d). Swinging the axe. *The Economist, January* 31: 69–70.
- The Economist. (2009, April). The Economic Impact of the Achievement Gap in America's Schools. Boston: McKinsey.
- The Economist. (2010a). The world turned upside down. *The Economist: Special Report,* April 17: 11–18.

The Economist. (2010b). Older and wiser. *The Economist: Special Report, March* 13: 1–17. Timmons, H. (2010). India expands role as drug producer. *The New York Times, July* 6: A1. U.S. Department of Labor. (2010). *Chartbook:International comparisons of hourly com*-

pensation costs in manufacturing. Washington, D.C. Bureau of Labor Statistics. UNCTAD. (2008). World Investment Report. Geneva: United Nations.

- Vaiman, V. (Ed.). Talent management of knowledge employees: Embracing non-traditional workforceLondon: Palgrave MacMillan.
 Varma, A., Budhwar, P., & DeNisi, A. (2008). Performance management systems. London:
- Varma, A., Budhwar, P., & DeNisi, A. (2008). Performance management systems. London: Routledge.

 Wadhwa, V. (2009). America's immigrant brain drain. Business Week, March 16: 68.
Werdigier, J. (2008). Retooling for a changing telecom landscape. The New York Times, March 8: C2.

- Wong, E. (2009). China's export of labor faces growing scorn. The New York Times, December 21: A1-9.
- Wooldridge, A. (2007). The battle for the best. *The Economist: The World in 2007*, 104.World Bank (2008). See the six indicators the World Bank uses to describe the extent of employment regulations in countries at www.doingbusiness.org.
- Zakaria, F. (2008). The post-American world. New York: Norton.