

The Decentering of the Global Firm

Mihir A. Desai

Harvard University and NBER

1. INTRODUCTION

ALMOST 20 years ago, Robert Reich questioned how firms are linked to nation states by posing a provocative question, ‘Who is Us?’. Reich argued that a nation’s interests could be advanced by firms from various nations and, indeed, that a firm’s national identity no longer guaranteed that it would advance the economic interests of a particular country. For example, a foreign firm with substantial investments in the United States may well be better for America than an American firm with most of its operations abroad.

Reich’s question provoked considerable debate but the ability to ascribe firms to nations was not contentious (Reich, 1990, 1991).¹ By such logic, firms such as Caterpillar are American companies by virtue of their history while Honda, for example, is a Japanese company. Indeed, this presumption underlies various policies and the oft-cited notion of ‘national competitiveness’ that links firms to countries. Until recently, this presumption seemed reasonable. Even as multinational firms dramatically increased the scale of their global operations, relocating various activities around the world in response to value creation opportunities, they largely retained their national identities and their headquarter activities remained concentrated in their home countries. While production or distribution might move abroad, the loci of critical managerial decision-making and the associated headquarters functions were thought to remain bundled and fixed.

Now, it appears that the centre cannot hold. The archetypal multinational firm with a particular national identity and a corporate headquarters fixed in one country is becoming obsolete as firms continue to maximise the opportunities created by global markets. National identities can mutate with remarkable ease and firms are unbundling critical headquarters functions and reallocating

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¹ For a response to Reich see Tyson (1991).

them worldwide. The defining characteristics of what made a firm belong to a country – where it was incorporated, where it was listed, the nationality of its investor base, the location of its headquarters functions – are no longer unified nor are they bound to one country.

For global companies today, there are many places that can feel just like home. Consider several recent examples:

- In 2004, private equity firms noted the valuation discrepancy between Celanese AG, a German chemicals business with worldwide activities, and comparable American chemicals companies with worldwide operations. After taking the company private, the investors transformed Celanese into an American firm. By re-centring the corporation in the US, the sponsors of the transaction capitalised on a sizeable opportunity created by valuation discrepancies between American and German chemicals corporations. Celanese AG remained the holding company for European and Asian businesses but Celanese Corporation, a Delaware corporation was created to be the parent company. To enhance the American character of the company, a Dallas headquarters was established and a number of Americans were appointed to the Board of Directors. In 2005, the firm was relisted through the US holding company on the New York Stock Exchange (NYSE) with a much higher valuation.
- A similar ‘re-potting’ transaction transformed Warner-Chilcott PLC, an Irish pharmaceutical company listed in the United Kingdom with the majority of its operations in the United States. After taking the firm private in 2004, the sponsors took the firm public again in 2006, listing it on the NYSE in 2006 through the use of a Bermuda-incorporated holding company. In short order, an Irish pharmaceutical company listed in the United Kingdom was transformed into a Bermuda holding company with its corporate headquarters offices in the United States that was able to tap US capital markets and also enjoy the higher valuation associated with being perceived as an American pharmaceutical company.
- Nestlé, a Swiss incorporated and listed company, was the sole owner of Alcon, a leading speciality ophthalmological pharmaceutical company that was also incorporated in Switzerland but headquartered in Texas. When Nestlé decided to publicly float a portion of Alcon in 2001, it wanted to attract American investors already familiar with the company but also retain Alcon’s Swiss identity for tax purposes. Investment bankers devised a solution that changed Alcon AG into Alcon Inc. Alcon adapted corporate by-laws and accounting standards to conform to US standards, featured prominent Americans on its Board of Directors, and listed its shares directly on the NYSE. This solution allowed Alcon to preserve tax benefits attendant with being a Swiss corporation but allowed American institutional investors

to invest in Alcon as a speciality pharmaceutical company rather than as a foreign stock. Today, Alcon Inc. is a Swiss corporation sanitised of its Swiss identity, headquartered in America, listed on the NYSE, with a global investor base.

In other high-profile examples, Rupert Murdoch uprooted News Corporation from Australia and reincorporated it in the United States in 2004, to access more readily American investors that might better appreciate media companies. Bunge, a large global agribusiness company, left Brazil for White Plains, New York, prior to going public to avoid being perceived as an emerging market company. Stanley Works (in)famously tried to lower its worldwide tax rate by leaving the United States for Bermuda, a move already made by its competitors, Ingersoll Rand and Cooper Industries. As explained in Appendix A, Stanley's proposed move required it to change its corporate structure but had no impact on its operations. In a similar move, Shire Pharmaceuticals relocated its headquarters in 2008 from the UK to Ireland after proposed changes in the UK's corporate tax and many other firms are considering similar moves. James Hardie, previously an Australian corporation listed in Australia but with headquarters in the United States, migrated to the Netherlands. The firm now adheres to Dutch corporate law but has kept its headquarters in the United States while its primary listing remains in Australia. Many Israeli technology companies routinely undertake so-called 'reverse sleeve' transactions whereby an Israeli firm becomes the subsidiary of a newly-created US parent company to secure financing and contracts while retaining its Israeli identity for most other purposes.

There are many other examples of firms with homes outside their country of origin. Forty per cent of Chinese red-chip companies listed in Hong Kong are legally domiciled in the Caribbean. New firms, too, no longer routinely establish themselves in their founders' country of birth. When Accenture, the global consulting division of Arthur Andersen, became an independent firm in 2000, it incorporated in Bermuda and listed its shares in New York. The founder of the start-up business Pixamo, a photo-sharing website based in Cambridge, Massachusetts, considered Delaware, Switzerland and the Ukraine as corporate domiciles prior to the firm's first round financing. Today, firms do not automatically establish a legal identity, locate their headquarters and list their shares in a single country.

As it turns out, if you cannot decide where home is, you can have multiple homes, even multiple national identities. Two global mining concerns, BHP and Billiton, wanted to merge but did not want to choose one incorporated home so they entered into a 'contractual merger'. The resulting dual-listed company is a single economic entity that can be invested in through the pre-existing Australian or UK companies. While one economic entity, each part of the firm has retained its local identity for its local investors, allowing for significant gains to their

investors. The publishing firm Reed Elsevier has preserved its separate British and Dutch identities. Reed Elsevier PLC is incorporated in the United Kingdom and listed on the London Stock Exchange while Reed Elsevier NV is headquartered in the Netherlands and listed in Amsterdam. Each company also has its own listing on the New York Stock Exchange. Although they have separate legal and national identities, cross-ownership makes the firm an economic entity. The dual-listed company, historically associated with mergers from the beginning of the twentieth century (such as Royal Dutch Shell and Unilever), is enjoying a renaissance as firms no longer feel compelled to have one home. The structure of dual listed firms is described in more detail in Appendix B.

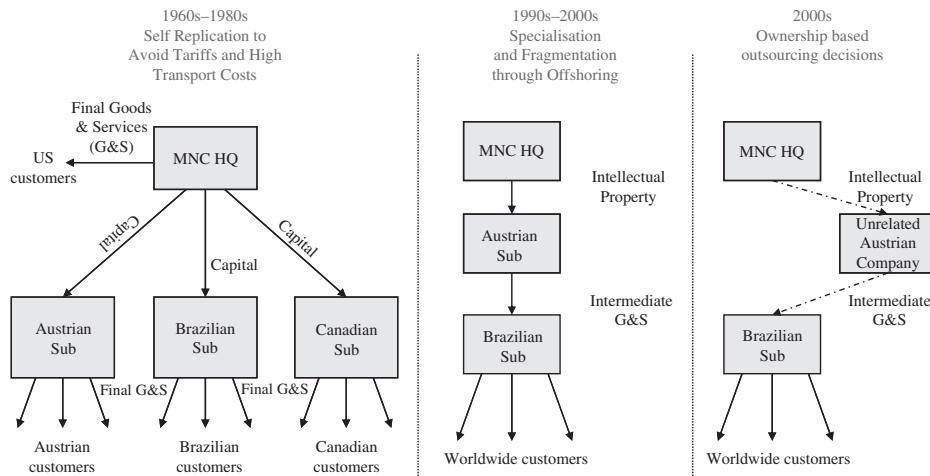
Such dramatic transactions and mergers are just one sign of how global firms are redefining their homes. Another sign is the unbundling of headquarters activities within global firms. Many firms with global activities have created regional headquarters. The natural next step has been to relocate traditional headquarters activities to the regional headquarters best suited for the purpose. For example, an American multinational firm headquartered in Chicago might find itself with a European regional headquarters in Brussels and an Asian regional headquarters in Singapore. Shortly thereafter, the global treasury and financing function might usefully migrate to Brussels and the global information technology function might usefully migrate to Singapore. In short, firms are becoming decentred. With these changes, the idea of firms as national actors rooted in their home countries is becoming outdated.

Why are these changes taking place and what are their consequences? In this paper, I place the increasing mobility of corporate identities within the broader setting of transformations to the 'shape' of global firms over the last half century. I argue that these varied transactions are of a piece and are responses to secular changes. Responding to these changes requires a reconceptualisation of what a corporate home is. I outline a potential reconceptualisation, describing how managers will make conscious choices about how to unbundle activities that have traditionally been centred in a home country headquarters. Policy-makers in countries around the world have to understand how to create attractive homes for firms, and researchers have to devise ways to incorporate these changes in their empirical and theoretical work.

2. THE CHANGING SHAPE OF THE MULTINATIONAL FIRM

The unbundling of the headquarters of the multinational firm follows a series of significant changes in the shape of multinational firms over the last half century. Figure 1 presents a schematic of these changes for a paradigmatic multinational firm. While oversimplified, the changes depicted in Figure 1 presage the current changes affecting the headquarters function.

FIGURE 1
The Changing Shape of the Global Firm



Initial forays abroad, particularly in the 1950s and 1960s, took the form of *self-replication*, or so-called horizontal foreign direct investment. In this stage, multinational firms sought to overcome high tariffs and transport costs by recreating themselves around the world to serve customers around the world. Such a strategy was an appropriate response to these high costs and also allowed investors in these firms to gain an exposure to various economies by investing in multinational firms. The headquarters remained in the firm's home country as most of the firm's activities were still there and critical decisions about which markets to invest in and how to invest were all made in the headquarters.

This self-replication came at a sizeable cost. Specifically, the duplication of capital investment in this model was only reasonable in a world of high transport costs and high tariffs. With the rapid decline of these costs, multinational firms reshaped themselves, becoming more vertically specialised. In the 1990s, *offshoring* of activities became much more prominent as global production chains began to be fragmented around the world. Capital efficiency was greatly improved through this so-called vertical foreign direct investment. While the home market no longer solely supported headquarters activities, headquarters remained critical for many of the higher value-added functions of the firm, such as research and development and product design.

The fragmentation of the global production chain through offshoring led to a key question that preoccupies firms today: if my activities are spread around the world in this way, do I need to own all of them? With *outsourcing*, firms contract with outside firms for some activities and only the most central activities remain within the ownership chain. In the 1990s, the shift to offshoring

occurred when activities were specialised in the countries best suited to them. Today, outsourcing represents a similar specialisation of activities across firms so that not every firm undertakes all activities.

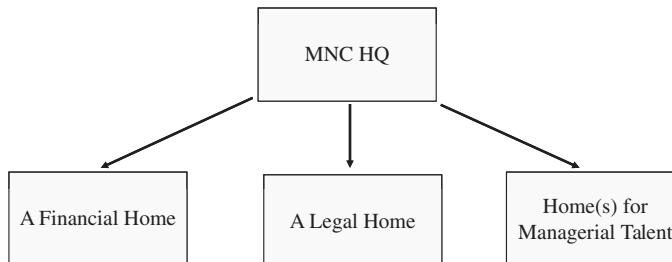
3. THE DECENTERING OF THE GLOBAL FIRM

Throughout the phases depicted in Figure 1, a firm's national identity remained immutable. As described above, national identities today are mutating and it has become difficult to ascribe firms to individual countries. These incipient changes can be conceptualised through Figure 2. Figure 2 depicts the three distinct functions of a corporate headquarters: a home for managerial talent, a financial home and a legal home. Until recently, multinational firms have located their legal home, their financial home and their home for managerial talent in the country in which they originated and this home country has determined the firm's national identity. These homes are now being separated and reallocated advantageously and the home for managerial talent can itself be served by many locations.

As one example of how firms today are unbundling these headquarters functions, consider the brief history of Genpact. In the early 2000s, Genpact (then known as GECAS) was the wholly-owned, outsourcing operation of General Electric and was the largest outsourcing operation in India. GE decided to partially divest this subsidiary to a number of private equity players in 2005. By 2007, the firm was named Genpact and was preparing to go public. In the process, its legal home was changed, first to Luxembourg and then to Bermuda. Today, Genpact's stock trades only in New York while its managerial talent sits primarily, but not exclusively, in India. With its origins as a subsidiary of GE and its NYSE listing is Genpact a US multinational? Or, does its mainly Indian managerial talent and its extensive operations in India make it an Indian multinational? Or, is Genpact a Bermudian multinational because it is incorporated in Bermuda? With its unbundled headquarters functions, Genpact's national identity is hardly clear-cut. Genpact represents how national identities are mutating and how it is becoming difficult to ascribe firms to particular nation states.

What is driving firms such as Genpact to undertake such changes? Are these moves merely fads? These developments appear to be responses to deeper, secular changes. First, the revolution in asynchronous communication now allows decision-makers to exchange ideas remotely and it is less necessary for managers to have physical proximity to each other. Firms today, therefore, have more scope to locate key managers in the most advantageous locations. Second, managerial talent is both increasingly mobile and powerful. The mobility of talent facilitates these changes and the power of talent often forces it. A number

FIGURE 2
Decentering the Global Firm



of private equity firms have been willing to splinter homes for managerial talent because of the preferences of highly valued talent who refuse to move.

A third force driving these changes is that countries increasingly compete to become the legal or financial homes for corporations. Low-tax countries, such as Bermuda and Ireland, have become compelling legal homes for firms from many countries. National stock exchanges actively compete for listings of foreign firms and many firms today are listed on a stock exchange outside their home country or on more than one stock exchange. Also, various countries, such as Dubai and Singapore, compete actively to be regional or global homes for managerial talent. Each of these developments is likely to continue and these are the very forces that have facilitated the unbundling of headquarters activities that traditionally had been co-located. Finally, and perhaps most importantly, the emergence of global shareholder and lender bases reinforces these trends. These investors often facilitate and demand these kinds of changes as they seek to champion value creation in new ways.

If firms can choose the most appropriate homes for their managerial talent, the most beneficial financial home, and the best legal home, what determines the best home for each of these functions?

a. Home(s) for Managerial Talent

The most traditional, and obvious, function of headquarters is that of a home for managerial talent and key decision-makers. A global firm, though, can have different homes for different functions in order to draw on different local talent pools or opportunities. For each critical headquarters function (the relevant ones will depend on the firm), managers must consider the location of relevant labour markets, local regulations that might deter or invite certain functions, and proximity to customers and suppliers. Chief marketing officers and their marketing departments might usefully reside close to major customer concentrations. Chief financial officers and their finance and accounting teams can

reside in countries with limited regulatory barriers and access to deep and broad financial markets, such as the United Kingdom, Belgium or the United States. Chief information officers can reside close to large pools of highly-skilled labour in countries with flexible immigration policies, such as Singapore or India. Heads of design might usefully locate near creative hubs in expensive metropolises, such as New York or Milan, and chief operating officers might locate in low-cost countries where production is concentrated, such as China, or in convenient hubs near their supply chains, such as Dubai or Singapore.

The choice of home or homes for a firm's managerial talent will have a significant impact on a company's culture, and changing this home can change the company's culture. For example, when private equity players took control of Celanese, its German-based managers were replaced with American-based managers. The sponsors of the transaction felt that American managers were both more familiar with private equity and more sympathetic with the objectives of the firm's new owners, including significant restructuring of the company. Lend Lease, a leading Australian property developer, provides another instructive example of the consequences of splintering the home for managerial talent. Lend Lease divided its most senior talent between Sydney and London for several years in the early 2000s with the CEO moving to London away from his managerial team. The move was inspired by, and apparently fulfilled, the desire to expose the organisation to global deal flow in a way that could not be facilitated otherwise.

The reallocation of a firm's managerial talent to a new home, or to different homes, is neither costless nor easy. In particular, internal communication networks and interpersonal relationships become more important. Senior management teams that are not well-integrated will not be able to handle such reallocations as trust, and pre-existing relationships will be particularly critical in these settings. Growing a culture is also much more challenging in such a decentralised set-up and such reallocations are best suited for more mature companies. These costs, while readily identifiable and daunting, must be compared with the potentially large benefits created by managerial specialisation and the ability to access differentiated resources easily.

b. A Financial Home

A firm also has to have a financial home, a place where its shares are listed and traded and its finance function is located. This financial home can now be distinct from the original birthplace of a firm, from where most of its managers are located and from its legal home. Genpact decided to list in New York where it is neither legally domiciled nor are there significant managers. A firm's financial home is the aspect of headquarters that has been most neglected. What happens in a financial home and why is it so important?

First, a firm's financial home determines what legal rules govern its relationship with its investors, and this relationship, in turn, impacts a firm's financing costs. The rights of investors and creditors vary significantly across countries. Firms whose legal home is situated in a country with weak investor protection have been shown to have higher financing costs because investors consider such firms riskier. Today, a firm can effectively recontract around poor rules that govern its relationship with investors by establishing its financial home in another location. Firms can accomplish this by cross-listing their shares on a stock exchange in a country with strong investor protection. Cross-border listings are now common, with many firms using depositary receipts to list their shares on one or more foreign stock exchanges (see Appendix C for more detailed information on cross-border listings). Cross-border listings effectively allow firms to bond themselves to stronger disclosure rules and investor rights than provided for in their local markets. There is considerable empirical evidence that firms from weakly regulated markets that cross-list their shares in well-regulated markets have a cheaper cost of financing because investors consider such firms less risky. In other words, a firm can lower its financing costs by choosing the right financial home without changing its legal home. These motivations underlie many cross-border listings and the efforts of some corporations to list primarily in the United States which has strong investor protection.

Second, a financial home will dictate the incentive compensation arrangements used to reward talent. While managerial talent can be located opportunistically around the world, hiring for some functions (and certainly for CEOs) is happening in global labour markets. Attracting and retaining talent today typically requires high-powered contracts that will not be fully valued if the underlying securities are in financial markets that are underdeveloped or narrow. Nestlé ran into this problem when it was the sole owner of the US-based ophthalmology company, Alcon. Alcon had to compete with US firms for managerial talent but stock options in Alcon's Swiss parent were not highly valued by Alcon's American managers. Alcon therefore based its incentive compensation on a phantom stock programme. Managers, however, frequently questioned the pricing of Alcon's phantom stock, an issue that was only resolved when Nestlé sold part of Alcon and the company was listed on the New York Stock Exchange. Global firms have to choose a financial home that facilitates their ability to compete for managerial talent.

Third, firms require a financial home for capital raising and capital allocation. Typically, countries where, for regulatory reasons or tax reasons, costs of funding are lower and capital can be reallocated around a firm most easily are desirable. The James Hardie decision to change its financial home to the Netherlands was dictated by the financing options available there and the News Corporation move to the United States was similarly motivated.

Fourth, a financial home dictates who your owners are. Even though shareholder bases are becoming increasingly global, where a firm lists its shares does have a significant impact on who owns its shares. Nestlé's listing in Switzerland ensures that it has a Swiss-dominated shareholder base. Nestlé may have reason to be content with its Swiss ownership. Swiss shareholders seldom challenge management or question performance, so Nestlé is largely protected from take-over attempts. When Nestlé sold off part of Alcon, though, it chose to have mainly American shareholders for Alcon and so listed it in New York. Why? It was in Nestlé's interest to get the highest valuation for Alcon so it was willing to accept the closer scrutiny and higher performance expectations of US shareholders. Shareholders in different countries may have distinct expectations from managers over possibly varying horizons. When a firm chooses to list in New York, it will open itself up to the demands and monitoring of US institutional investors. Similarly, European shareholders may require discussions of corporate social responsibility that would otherwise not be germane. Financial homes help dictate a firm's shareholders and, accordingly, corporate priorities.

Finally, the choice of a financial home will dictate firm value. While it is tempting to think that no valuation discrepancies can arise between comparable firms in today's globally integrated markets, this does not appear to be the case. Equity research analysts and institutional investors are deeper in some markets than others and this can vary by industry. The Celanese, Warner-Chilcott and News Corporation examples demonstrate that relocating a financial home can give rise to considerable value creation.

Picking a financial home can be thought of as two distinct decisions. First, a firm has to decide where to list its shares and have its stock traded. This decision will have an impact on the firm's financing costs, its valuation, its ownership, its contractual relationships with its investors and its success in competing for managerial talent with stock-based incentives. Second, a firm has to decide where its finance function will be located and which countries offer the firm the most seamless ability to reallocate funds across the world. This decision affects the firm's capital-raising and capital allocation functions. The two decisions on a financial home need not be twinned. For example, it is conceivable that an NYSE-listed stock will have a CFO administering a finance team in Singapore. Just as firms may have several homes for their managerial talent, they may have more than one financial home.

c. A Legal Home

Ultimately, a corporation is a legal person, a citizen of the country where it is incorporated. A legal home creates obligations and opportunities. First, corporate residency determines the firm's tax obligations at the corporate and investor level. There are wide variations in tax rates and in the definition of

taxable income across countries. For example, a country can choose to tax the income earned within its borders or the income earned by its citizens regardless of where it is earned. Similarly, a country can choose varying ways to tax dividend income and can afford relief to dividend taxes depending on an investor's residence. Today, firms can choose a legal home that can minimise its tax obligations at the corporate and individual level. Stanley Works, for example, tried to move to Bermuda in order to circumvent the worldwide corporate tax regime of the US, and the BHP-Billiton structure was designed in part to preserve individual tax benefits for residents of different countries. A firm can change its legal home through a specially-designed transaction or a merger.²

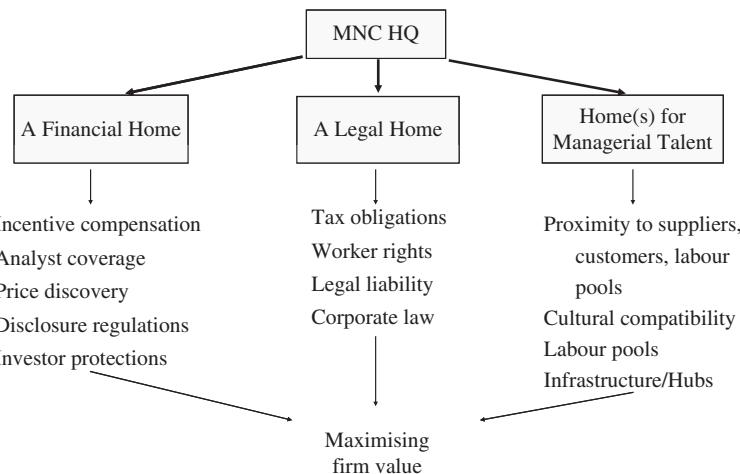
Legal homes can also determine the rights for a firm's investors and workers, wherever they are located. Countries vary tremendously in the degree to which they protect creditors during bankruptcy proceedings. Unsurprisingly, weaker investor protections have been found to give rise to higher costs of finance, lower valuations and higher control premia on stocks with voting rights. By reincorporating opportunistically, managers can choose to go to locales where investor rights are stronger (and gain valuation benefits) or weaker (and gain more autonomy). Similarly, worker participation in firm governance (as in the German co-determination system) and worker rights can vary according to a firm's legal home. These arrangements, in turn, will likely influence firm value. The ability to change their legal home means that firms are no longer stuck with the creditor rights or worker rules with which they were born.

Figure 3 summarises this reconceptualisation of the determinants of how firms are dividing up traditionally bundled homes. Firm value will be maximised when each function is located in the most advantageous location.

What types of firms are most likely to maximise firm value through the decoupling and optimal location of the traditional headquarters functions? Firms in global industries – ones with global customer bases and global competitors – are likely to have the skills and knowledge required to identify the best homes for each of their headquarters functions. Multinationals with significant intangible assets, such as pharmaceutical and technology firms, have experience in decentralised processes, and such experience could be applied to the unbundling of headquarters activities. Mature businesses with strong cultures have the strong networks required to maintain the ties among differently-located headquarters functions. Start-up firms may also be well positioned to locate their different headquarters functions opportunistically because they are less likely to be bound to a particular location by their heritage. More generally, the decoupling, and optimal allocation, of homes for managerial talent, a legal home and a financial home requires significant managerial effort and an increased

² For an explanation of such transactions see Appendix A and Desai and Hines (2002).

FIGURE 3
Reconceptualising the Corporate Home



emphasis on the development of the internal communication, personnel and cultural networks of firms.

4. HOW SHOULD COUNTRIES RESPOND TO THESE CHANGES?

These developments pose bracing challenges to governments accustomed to considering corporations as captive citizens. Some governments will be tempted to bar the doors and censure firms that opportunistically rearrange their headquarters. Following the uproar over Stanley Works' proposed move to Bermuda, for example, the United States enacted legislation that limits the ability of US firms to change their legal domicile. (See Appendix A.) Such efforts may work in the short run for very large countries. They will probably fail for smaller countries that cannot censure companies by withholding government contracts. And they will surely fail in the longer run as the global market for corporate control can circumvent local efforts to retain ownership. In other words, saying an American corporation cannot leave for Bermuda is a recipe for a foreign acquirer to buy the American firm and achieve the same result in other ways.

A more reasoned response requires countries to dismantle bars to these developments and to adopt strategies to capitalise on them. Policymakers in every country have to reconsider rules based on national identities. These rules can range from prohibitions that restrict ownership of certain industries and companies to particular nationalities (usually locals), to tax rules that create distinct obligations based on national identities rather than the location of activities.

Ownership rules based on national identities inhibit the efficient ownership of firms and industries. In the United States, the limitations on foreign ownership in the airline sector provide one such example. Even though British founder Richard Branson owned less than 25 per cent of the low-cost start-up, Virgin America, it took the new airline 17 months to gain regulatory approval because its US competitors charged that the new airline would be unduly influenced by its British investors. Virgin America had to agree to replace its chief executive, so as to satisfy tests of nationality, in order to operate in the United States.

Similarly, the attempt to tax the worldwide income of US firms inevitably runs up against the pressures described in this paper. Other countries have attempted novel definitions of citizenship for tax purposes, defining corporate citizens not by the location of incorporation but by tests that measure the location of headquarters activities. The logic of the trends discussed in this paper suggests that countries intent on taxing corporate income may have to remain content with taxing the income associated with activities occurring within their borders. Such regimes usually occasion fears that all profits will be stripped away to lower-tax countries. Countries may need to devote more attention to enforcing transfer pricing rules that ensure that value-creation activities that occur within their borders are properly measured and reported rather than trying to insist on an outmoded notion of what determines a firm's national identity.³

Finally, countries can attempt to change legal rules associated with investor rights that deviate considerably from worldwide norms. Historically, countries with weak investor protections hurt local firms by increasing their cost of capital. Now, these countries will simply see their firms move their financial homes or get acquired by firms able to exploit these margins. Countries can prevent local firms from migrating toward deeper capital markets by improving local financial conditions and strengthening investor protections.

Ultimately, countries must respond to these developments with efforts toward increased specialisation and greater investments in human capital. All of these headquarters functions require highly-skilled workforces so countries that invest in education and training will be attractive locations for the headquarters functions. Countries can also respond to the decentering of global firms through specialisation. Tax-haven countries are instructive examples of such specialisation. Low-tax countries in the Caribbean and in Europe have prospered by specialising in providing legal and financial homes for corporations. Indeed, Ireland's remarkable economic trajectory over the last two decades rests, in part, on its transformation into the premier regional headquarters for multinational firms. Low tax rates, an accommodating regulatory regime, proximity to major markets, and strong institutions have combined to make Ireland an attractive home away from home. While smaller countries can

³ Tax policy in an international setting is discussed in Desai and Hines (2003, 2004).

specialise in this way, larger countries are more likely to succeed by reducing the reasons for their native corporations to seek multiple homes.

5. IMPLICATIONS FOR RESEARCHERS

The changing shape of multinationals presents researchers with several challenges. Empirical work must wrestle with a new set of difficulties. The assumption that a firm's operations are local has been inaccurate for some time. Cross-country regressions that analyse 'local' firms by attributing their characteristics to the nations in which they are listed have neglected the important qualification that many of their operations are not in those countries. Now, assigning national identities to firms in large sample studies has become problematic as well. When firms have different locations for their legal home, their financial home, and several homes for their managerial talent, which home determines their national identity? In particular, financial or legal homes are typically employed to assign firms to countries in such regressions with little attention paid to the underlying realities for these firms. For example, Genpact would be characterised as 'American' in most cross-country regressions because such regressions simply use an NYSE listing to define American firms. Such comparisons were always crude but the inability to capture the nature of operations and now their actual identities makes such studies particularly hard to interpret. More granular, empirical work on the ways firms are unbundling these homes will help inform new empirical, large-sample methods for capturing these developments.

Theoretical efforts to analyse tax competition or investor protections typically take firm national identity as a given and then considers responses to home environments. Future work might more usefully consider how managers choose distinct homes with different purposes, ranging from valuation consequences to tax liabilities and self-interest. These choices might be nested usefully within a more accurate portrait of the market for corporate control, which itself facilitates rapid changes of national identity. As with tax avoidance, the factors that inhibit more aggressive splintering of homes may also be a useful line of inquiry. What frictions inhibit firms from doing this more aggressively?

6. CONCLUSIONS

The notion of a firm with a unique national identity is quickly fading. A Bermuda-incorporated, Paris-headquartered firm, listed on the NYSE with US-style investor protections and disclosure rules, a chief information officer in Bangalore, a chief finance officer in Brussels and a chief operating officer in Beijing may not sound nearly so fanciful in the near future. The conclusion that 'the

centre cannot hold', however, does not necessarily mean that 'things fall apart'. The same forces that have dictated the changing shape of the multinational firm over the last several decades will propel these changes as well, even if much hand-wringing is likely to occur. An appropriate response to these developments should acknowledge the difficulties inherent in policies predicated on characterising firms as exclusively linked to specific countries.

APPENDIX A

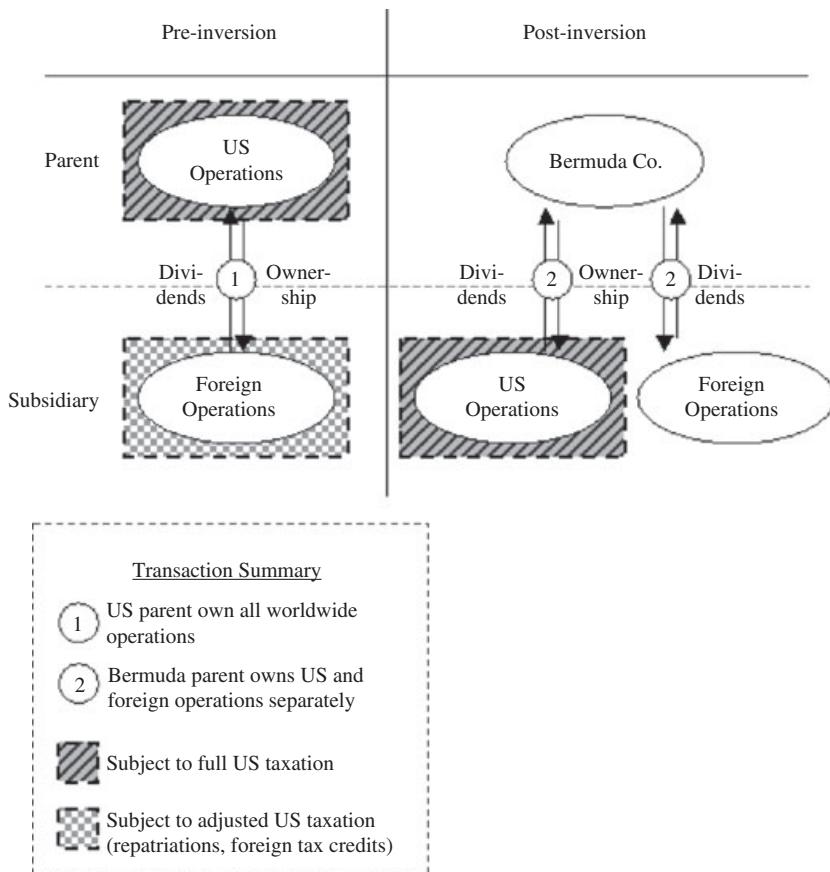
Stanley Works and Corporate Inversions

In February 2002, Stanley Works, a leading US toolmaker headquartered in New Britain, Connecticut, announced its intention to move its legal domicile to Bermuda so that the company could lower its worldwide tax rate and become more globally competitive. Stanley described the move as simply a change in the company's legal structure, one that would have no impact on its day-to-day operations. Stanley was currently a US firm with foreign subsidiaries; the move to Bermuda meant only that Stanley would become a Bermuda firm with subsidiaries in the US and in other countries (see Figure A1).

In announcing its decision to invert its corporate structure and become a foreign corporation, Stanley was following the example of two of its competitors (Cooper Industries and Ingersoll Rand), other US firms that had recently moved abroad, and firms that chose to incorporate new subsidiaries outside the US. Nonetheless, Stanley's announcement provoked an outcry against selfish and unpatriotic US firms moving to tax havens to avoid paying US taxes, and several Congressmen vowed to deny such firms defence contracts. The close vote in favour of the move at Stanley's AGM prompted the Connecticut Attorney General to launch an investigation into 'irregularities' that occurred in the voting. In the end, Stanley decided not to implement its inversion but its CEO insisted that there was a compelling need for a change in US tax laws because they undermined the global competitiveness of American firms.

Most countries around the world tax income that is generated within their borders. In such territorial tax systems, firms are taxed by their home government on their domestic income and pay taxes to foreign governments on their foreign-source income. The US, in contrast, has a worldwide tax system and firms must pay US taxes on both their domestic and foreign income. US firms with foreign operations, of course, must also pay foreign taxes; to avoid double taxation, the US tax regime allows foreign taxes to be offset against US taxes but not all firms qualify for such credits. Since foreign source income is liable to tax when it is repatriated to the US, there is an incentive for US firms to defer receiving dividends from their foreign affiliates and to search for opportu-

FIGURE A1



nities to reinvest their foreign-based income abroad. US firms can avoid the complexities and relative disadvantages of the US worldwide tax system by restructuring themselves as foreign corporations, and an increasing number of firms did so during the 1990s.

Congress responded to the cry against firm expatriations and the call for tax changes with the American Jobs Creation Act of 2004. The Act made it more difficult for US firms to restructure themselves as foreign firms; expatriate firms would still be considered US firms for tax purposes if they relocated to a country where they had no substantial operations and their shareholders remained essentially the same. The principle of taxing the worldwide income of US firms remained intact, but the law simplified the system of foreign tax credits and the rules on allocation of expenses among US and foreign operations. It also lowered the tax on repatriated foreign earnings to 5.25 per cent

for one year. Firms took advantage of this concession by repatriating over US\$300 billion of foreign profits, a six-fold increase over the previous year.

APPENDIX B

The Dual Listed Company Structure⁴

Just as some individuals have dual citizenship, some firms have two national homes. A dual listed company (DLC) has two distinct but equal parents located in different countries. Each parent is a legal resident in its home country and is listed on its home stock exchange, but the firm otherwise operates as a single entity. The parent companies hold shares in each other or have cross-holdings in each other's subsidiaries and dividends to shareholders of each of the parents are equalised according to the founding agreement. This corporate structure dates back to the 1903 merger between Royal Dutch Petroleum and Shell Transport. The firm merged its operations but retained separate legal identities and separate stock exchange listings in the Netherlands and the UK. In 1930, the combination of Lever Bros. in the UK and Margarine Unie in the Netherlands created another DLC, Unilever. For many years, these were the only examples of this unusual company structure. In the late twentieth century, as cross-border mergers became more common, a few more firms became DLCs, including the Swiss/Swedish firm ABB, the British/Dutch firm Reed Elsevier, and the Australian/British firms GKN Brambles and BHP Billiton.

A DLC structure allows firms in different countries to combine their operations but still retain their separate national identities and shareholder bases. This type of merger is sometimes more attractive to shareholders since shareholders in each country can continue to hold shares in and receive dividends from a domestic firm; this is often important for institutional shareholders with restrictions on their foreign holdings. A DLC structure may also facilitate regulatory approval for a merger since each parent in a DLC remains a domestic firm and the merger is usually perceived as a combination of equals. A DLC structure can provide significant tax advantages, too. In a regular merger, shareholders of one firm have to sell or exchange their shares and the transaction may trigger a capital gains liability. In a DLC merger, each group of shareholders retains shares in one of the parents and there is no capital gains liability for

⁴ Firms are often described as 'dual listed' when their shares are listed on more than one stock exchange and 'dual listings' may refer to firms listed on two exchanges in the same country, or to firms listed in two different countries. 'Dual listings' also sometimes refer to firms that list different classes of shares. There are numerous firms with multiple (or dual) listings, but only a few firms have the dual listed company structure described above.

any shareholder. In a DLC, each parent pays dividends to its own shareholders, and this may be beneficial when two countries have different tax treatments of dividend payments.

Firms and tax experts continue to explore the potential of DLC structure but there is still uncertainty about the regulatory and tax implications for such firms and there are only a handful of DLCs. Some firms have abandoned the structure: ABB ceased being a DLC in 1998, and Royal Dutch/Shell moved to a unified structure and single stock listing in 2001 following criticisms of its corporate governance. Other firms continue as DLCs but have moved to simplify an unwieldy structure stemming from having two parents. Unilever now has a single chief executive for the first time in its history, and Reed Elsevier has instituted a unitary management structure and identical boards for each of its parents.

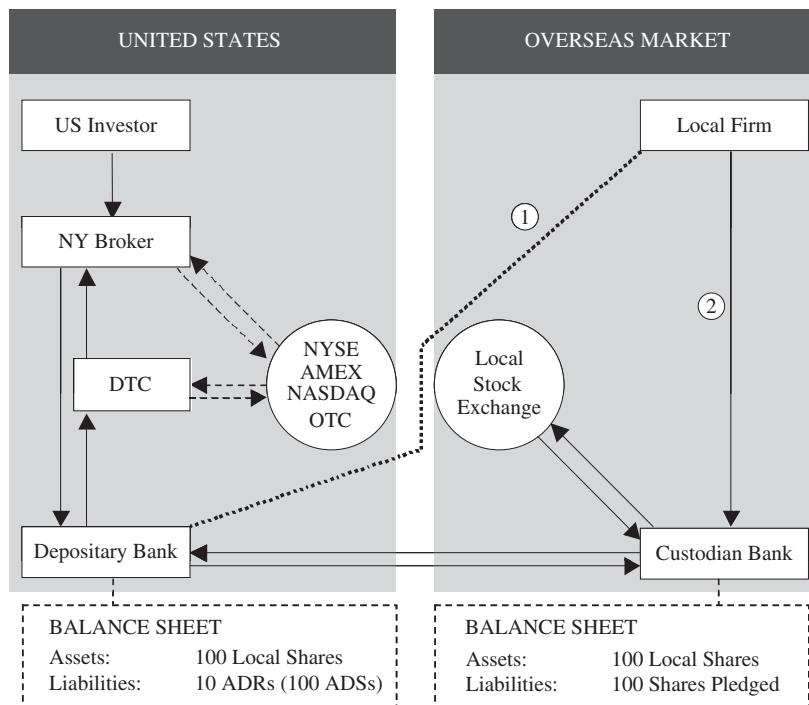
APPENDIX C

Cross-border Listings

Over 3,200 companies around the world are listed on stock exchanges outside their home country. The NYSE lists over 400 foreign companies (from 47 countries) and NASDAQ lists around 350 non-US firms. In Europe, the London Stock Exchange Main Board lists over 350 non-UK firms and about the same number of foreign firms are listed on its AIM market for smaller companies. Some firms list their shares directly on a foreign exchange, meeting the same regulatory requirements as domestic firms listed on the exchange, but shares in most cross-listed firms are traded in the form of depositary receipts, or DRs. In 2007, the trading value of DRs on stock exchanges around the world was US\$3.3 trillion, representing a record level of cross-border investing. US stock exchanges accounted for 88 per cent of the traded value of DRs in 2007 (Bank of New York Mellon, 2007).

Depositary receipts make it possible for investors to invest in foreign firms in the same way they invest in domestic firms. Most foreign firms listed in the US trade in the form of American Depositary Receipts, or ADRs. Shares of the foreign firm are held by a depositary bank which issues depositary receipts that are traded on a US exchange just like domestic stocks. (The underlying mechanics of an ADR are illustrated in Figure C1.) ADRs are listed on a US exchange, so American investors do not have to deal with a foreign broker or a stock exchange which may be unfamiliar to them. ADRs are denominated in US dollars, so investors do not incur any foreign exchange costs in buying or selling shares or when they receive dividends. Foreign firms trading through ADRs that are listed on a US exchange have to meet US accounting and governance standards, so investors

FIGURE C1
The Mechanics of an ADR



① The foreign firm signs an exclusive deposit agreement with the depository pursuant to which the firm will provide shares to back the initial ADR issuance and the depository will maintain the ADR facility.

② The local firm issues shares directly into the custodian as underlying securities for the ADRs.

do not have to worry about foreign reporting conventions or be uneasy about the shareholder protections available to them as foreign investors. ADRs thus overcome many of the barriers to foreign investments and facilitate international diversification by investors. Other types of depositary receipts meet the needs of investors around the world. European investors, for example, can use euros to invest in non-euro area firms through European Depositary Receipts (EDRs).

Cross-listing allows a firm to access more investors and can increase the liquidity of its shares. A listing on the NYSE or other major exchange makes a foreign firm more visible to investors and may broaden its shareholder base. A US listing also provides investors with strong shareholder protections because US regulatory and disclosure standards are more stringent than in many other countries, making the shares less risky. Increased liquidity, a larger shareholder base, and lower risk may increase firm value. Academic studies of firms that cross-listed in the US suggest that such firms do have higher returns and lower their cost of capital.

There are risks to cross-listings, both to firms and to local stock exchanges. Firms that issue ADRs may not attract sufficient investor interest in the US, and trading volume may 'flow back' to the home market, meaning the firm gains little from its cross-listing. Cross-listed firms may draw trade away from local exchanges. This is an issue in emerging economies when trade in cross-listed domestic firms migrates to larger, more international centres, undermining trading volume on the local exchange and making it more difficult to sustain an active market for local firms.

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