

NON-EQUITY MODES OF INTERNATIONAL PRODUCTION AND DEVELOPMENT

CHAPTER IV

In today's world, policies aimed at improving the integration of developing economies into global value chains must look beyond FDI and trade. Policymakers need to consider non-equity modes (NEMs) of international production, such as contract manufacturing, services outsourcing, contract farming, franchising, licensing and management contracts.

Cross-border NEM activity worldwide is significant and particularly important in developing economies. It is estimated to have generated over \$2 trillion of sales in 2010. Contract manufacturing and services outsourcing accounted for \$1.1–1.3 trillion, franchising \$330–350 billion, licensing \$340–360 billion, and management contracts around \$100 billion. In most cases, NEMs are growing more rapidly than the industries in which they operate.

NEMs can yield significant development benefits. They employ an estimated 14–16 million workers in developing countries. Their value added represents up to 15 per cent of GDP in some economies. Their exports account for 70–80 per cent of global exports in several industries. Overall, NEMs can enhance productive capacities in developing economies through their integration into global value chains.

NEMs also pose risks for developing countries. Employment in contract manufacturing can be highly cyclical and easily displaced. The value added contribution of NEMs can appear low in terms of the value captured out of the total global value chain. Concerns exist that TNCs may use NEMs to circumvent social and environmental standards. Developing countries need to mitigate the risk of remaining locked into low-value-added activities.

Policy matters. Maximizing development benefits from NEMs requires action in four areas. First, NEM policies need to be embedded in overall national development strategies. Second, governments need to support efforts to build domestic productive capacity. Third, promotion and facilitation of NEMs requires a strong enabling legal and institutional framework, as well as the involvement of investment promotion agencies in attracting TNC partners. Finally, policies need to address the negative consequences and risks posed by NEMs by strengthening the bargaining power of local NEM partners, ensuring fair competition, protecting labour rights and the environment.

A. THE GROWING COMPLEXITY OF GLOBAL VALUE CHAINS AND TNC GOVERNANCE

In the past, TNCs primarily built their international production networks through FDI (equity holdings), creating an internalized system of affiliates in host countries owned and managed by the parent firm.

Over time, TNCs have also externalized activities throughout their global value chains. They have built interdependent networks of operations involving both their affiliates and partner firms in home and host countries. Depending on their overall objectives and strategy, the industry in which they operate, and the specific circumstances of individual markets, TNCs increasingly control and coordinate the operations of independent or, rather, loosely dependent partner firms, through various mechanisms. These mechanisms or levers of control range from partial ownership or joint ventures, through various contractual forms, to control based on bargaining power arising from TNCs' strategic assets such as technology, market access and standards. Such mechanisms are not mutually exclusive and they can be as much complements as substitutes to FDI. In this chapter, we refer to these TNC networks as global value chains (GVCs).

WIR11 focuses on “non-equity modes” of TNC international production (NEMs) as alternative forms of governance of TNC-controlled global value chains. NEMs include, for example, contract manufacturing, services outsourcing, contract farming, franchising and licensing, as well as other types of contractual relationship through which TNCs coordinate and control the activities of partner firms in host countries.

From a policy perspective, to pursue the integration of developing economies into global value chains it is no longer enough to focus on attracting FDI and TNC affiliates on the one hand, or to promote arm's-length trade on the other. Policymakers need to consider a myriad of alternative networked forms of TNC operations, each of which comes with its own set of development impacts and policy implications.

1. TNC value chains and governance choices

Foremost among the core competencies of a TNC is its ability to control and coordinate activities within a global value chain. TNCs, like all firms, can decide to conduct such activities in-house (*internalization*) or they can entrust them

to other firms (*externalization*) – a choice analogous to a “make or buy” decision. Internalization, where there is a cross-border dimension, results in FDI, whereby the international flows of goods, services, information and other assets are intra-firm and under the full control of the TNC. Externalization results either in trade, where the TNC exercises no control over other firms, or in non-equity inter-firm arrangements in which contractual agreements condition the operations and behaviour of host-country partner firms.

The choice between internalization and externalization is typically based on the relative costs and benefits, the associated risks, and the feasibility of each option (Buckley and Casson, 1976; 2001). Internalization of cross-border activities brings with it the costs of running complex, multi-plant, multi-currency operations, which tend to increase the greater the social, cultural and political differences between locations. It also implies internalizing the full extent of risk associated with the activity, including capital exposure and business uncertainty. Finally, it assumes that the technical capability, skills and know-how required to perform the activity are either present in the firm, or not prohibitively expensive or time-consuming to acquire.

Balanced against the costs of internalization are the obvious advantages of retaining full control of value-chain activities. To start with, TNCs will want to maximize “value capture” – externalization clearly

TNCs manage global value chains through internalization (ownership) and externalization (including NEMs). NEMs and FDI can be substitutes or complements, with the choice based on relative costs, benefits and associated risks.

implies giving up part of the profits generated along the chain. Secondly, internalization avoids the transaction costs associated with finding suitable third parties and then stipulating contractual arrangements that tend to become more complex the greater the perceived risks associated with loss of control over parts of the value chain and over assets and valuable intellectual property (IP). Finally, internalization also eliminates the costs of managing relationships with NEM partners on a continuous basis, including flows of knowledge, goods and services; communication and information flows; and monitoring and control of compliance with contractual obligations.

Externalization has a number of intrinsic advantages. These include shifting of certain costs and risks to third parties, as well as gaining rapid access to the assets and resources third parties may bring to the partnership. These can be “hard” assets such as plants and equipment, access to low-cost resources, technological capability and know-how, or often equally important “soft” assets, such as networks and relationships in host countries. Externalization allows the TNC to establish a more effective internal division of labour, freeing scarce resources to be used in other segments of its value chain – in other words, it allows a focus on “core business”. Externalization is clearly more feasible if the knowledge and intellectual property required to conduct the activity are transferable, i.e. not tacit and to some extent standardized or codified.

From the TNC's perspective, the terms of contracts underpinning non-equity relationships are aimed at minimizing the cost of externalization and at protecting the assets, technology and IP exchanged. Non-contractual levers of control can also play a role in minimizing costs and risks to the TNC – the superior bargaining power of the TNC will alleviate concerns related to giving up a measure of control over part of its value chain. The degree of control given up by the TNC, the costs and associated risks of externalization, and the type of contractual and non-contractual levers which come into play, vary by mode, context and relative bargaining power of TNCs and NEM partners (see below in section A.2).

In building their international production networks, TNCs therefore have to decide not only on a location, but also on the mode of control and coordination

of international operations. In the classic economic model describing this decision-making process, the ownership-location-internalization (OLI) model (Dunning, 1980),² the choice of mode in host countries is between ownership (FDI) and arm's-length trade or licensing. Non-equity modes of international production represent an evolution of this model; they allow TNCs to enter a “middle ground” (figure IV.1) in their GVC governance by externalizing activities while still maintaining a level of control, i.e. improving the trade-off between the advantages and the costs of externalization (Hennart, 2009). The choice is thus no longer between control through ownership (FDI) or no control (trade), but between a range of modes in which control exercised in various configurations and to various degrees. Thus, in the case of wholly owned host country affiliates, control is defined purely by ownership; in the case of NEMs, control is exercised through contracts and bargaining power (table IV.1). Equity joint ventures are a special case in which TNCs control flows from a mix of equity and non-equity governance.

Figure IV.1. Non-equity modalities: A middle ground between FDI and trade



Source: UNCTAD.

The ultimate ownership and control configuration of a GVC is thus the outcome of a set of strategic choices by the TNC. The type of non-equity modes that are available or appropriate along GVCs varies by value chain segment. Figure IV.2 shows that NEMs are not specific to any particular part of the value chain or type of activity – TNCs are generally prepared to externalize any activity that is not fundamental to its competitive advantage in its market or industry and that can be carried out at lower cost or more effectively by third parties (including overseas), when the risks associated with externalization are limited or can be contained. Activities that are knowledge-intensive or high value added are not precluded. While certain patterns of

Table IV.1. Different modes of TNC governance in global value chains

Types of governance	Translation to modes of international operation	OLI-model		
		Ownership advantages	Locational advantages	Internalization advantages
Control through ownership	FDI, direct participation in host-country firms	√	√	√
Contractual levers of control	Contractual agreement conditions the behaviour of a host-country firm	√	√	-
Control based on bargaining power	Host-country firm dependence on access to TNC strategic assets and the TNC network conditions its behaviour	√	√	-
No control	Arm's-length market transactions, trade	√	-	-

Source: UNCTAD, adapted from Dunning (1980).

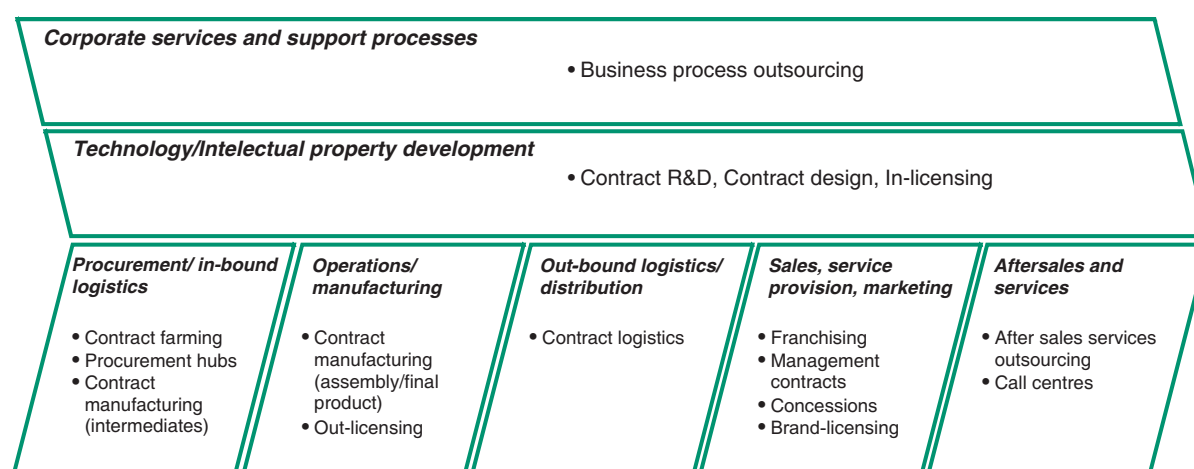
NEM activity have emerged in different industries, it is useful to view the propensity of any given segment of a value chain to be externalized is entirely specific to the industry or the individual TNC.

In some parts of the value chain NEMs and FDI may be substitutes, while in others the two may be complementary. Substitution occurs where a TNC has a choice between different modes and makes a cost-benefit trade-off, for example where a firm has the option of either building a plant to produce and supply products to an overseas market, or alternatively licensing the required technology and IP to a local manufacturer. It may also occur where the industry structure predetermines the outcome of the trade-off. For example in the electronics industry, in most cases construction of a fully owned new components or assembly plant by a design- or brand-owner no longer makes economic sense in the presence of large and sophisticated global contract manufacturing firms.

Complementarity is a characteristic of TNC coordinated international production systems, which encompass a web of owned affiliates and third-party NEM relationships; both modes of operation are an integral part of the chain of global value creation. Moreover, complementarity may exist at the same stage in the value chain, where for example directly owned retail outlets coexist with franchise outlets, or where foreign affiliates are established to manage and facilitate NEM relationships (e.g. a commercial, procurement or logistics entity to support multiple contract manufacturing relationships in the same overseas market).

The composition of a TNC-governed GVC, and its ownership and control configuration, are dynamic. The partners in NEM relationships evolve over time. In some industries, NEM partner firms have grown into TNCs in their own right, not unusually expanding their NEM operations to new production bases or

Figure IV.2. Selected NEM-types along the value chain



Source: UNCTAD, based on Porter's classic value chain representation (Porter, 1985).

markets through FDI. Examples include Foxconn (Taiwan Province of China) (contract manufacturing) and Arcos Dorados (Argentina) (franchising). The mix of FDI and NEMs within GVCs can also shift as technologies and standards change. The evolution of TNC strategies in transition economies, broadly from FDI to franchising after the region opened up to international investors, is a case in point (box IV.1).

2. Defining features of NEMs

NEMs are contractual relationships between TNCs and partner firms, without equity involvement. Bargaining power represents an additional lever with which TNCs influence their partners, and the sources of this power vary by mode.

A cross-border non-equity mode of TNC operation³ arises when a TNC externalizes part of its operations to a host-country-based partner firm in which it has no ownership stake, while maintaining

a level of control over the operation by contractually specifying the way it is to be conducted. Specifications may relate to, for example, the design and quality of the product or service to be delivered, the process and standards of production, or the business model that the partner firm must adhere to. In distinction to purely arm's-length transactions,

they have a *material impact on the conduct of the business*, requiring the host-country partner firm to, for example, make capital expenditure, change processes, adopt new procedures, improve working conditions, use specified suppliers, and so forth.

Thus the defining feature of cross-border NEMs, as a form of governance of a TNC's global value chain, is *control over a host-country business entity by means other than equity holdings*, although each type of NEM has its own particularities.⁴ A parallel can be drawn with FDI. The defining feature of FDI, to distinguish it from other forms of investment, is a significant level of control (a minimum equity stake of 10 per cent in host-country business entities) and a long-term interest in the host-country operation. This issue of a long-term interest also arises in the case of NEMs, as partner firms become an integral part of the TNC's GVC and their performance is an integral part of the TNC's overall competitiveness.

The various forms of NEM, summarized in table IV.2, can also be compared to FDI in terms of their motivation. Some, such as contract farming, are resource-seeking; some are efficiency-seeking (contract manufacturing, outsourcing); and some are market-seeking (brand licensing, franchising). Furthermore, some types of NEM

Box IV.1. The evolution of retail franchising in transition economies

One of the main economic challenges of transition economies in the early transition period was the reconstruction of the services sector. Retail services in particular needed modernization, as the distribution networks created for the centrally planned system had become unsustainable. Transition economies relied heavily on foreign investors for capital, technology and know-how in logistics, network development and marketing.

International retailers entered the market almost exclusively through equity investments (FDI). The share of retail in the inward FDI stock of transition economies was between 5 and 7 per cent in the late 1990s, compared with less than 1 per cent in the rest of the world. For TNCs, FDI, including the acquisition of privatized firms, was the fastest way to enter the region. Moreover, the underdeveloped business environment and a lack of appropriate partners often precluded non-equity forms of operation (franchising).

Gradually, as the transition economies advance, foreign operators are increasingly opting to develop their retail networks through franchising. Their foreign affiliates, including purchasing and marketing organizations, logistics networks and warehouses, often serve as a basis for building franchising operations. In addition, through their local operations they have built local capabilities and skills, both by bringing in expatriate staff and by training local personnel.

Thus with the evolution of the local market, retail TNCs are shifting their operations from FDI to franchising, though many maintain an FDI presence. For example, in 2011, in the Russian Federation there were 305 foreign franchise systems out of 595, compared to only 33 in 1996. The number of franchisee outlets linked to foreign franchisors had risen to 3,446, up from only 440 in 1996.

Source: UNCTAD, based on data provided by the East European Franchise Association.

Table IV.2. Definitions of selected types of cross-border NEMs

NEM type	Definition
Contract manufacturing Services outsourcing ^a	Contractual relationships whereby an international firm contracts out to a host-country firm production, service or processing elements of its GVC (extending even to aspects of product development). All go under the general rubric of "outsourcing". Services outsourcing commonly entails the externalization of support processes including IT, business and knowledge functions.
Contract farming	Contractual relationship between an international buyer and (associations of) host-country farmers (including through intermediaries), which establishes conditions for the farming and marketing of agricultural products. See also <i>WIR09</i> .
Licensing	Contractual relationship in which an international firm (licensor) grants to a host country firm (licensee) the right to use an intellectual property (e.g. copyrights, trade marks, patents, industrial design rights, trade secrets) in exchange for payment (a royalty). Licensing can take various forms, including brand licensing, product licensing and process licensing. In-licensing refers to a company acquiring a licence from another firm; out-licensing entails sale of intellectual property to other firms. See also <i>WIR05</i> .
Franchising	Contractual relationship in which an international firm (franchisor) permits a host country firm (franchisee) to run a business modelled on the system developed by the franchisor in exchange for a fee or a mark-up on goods or services supplied by the franchisor. Franchising includes international master franchising, with a single equity owner of all outlets in a market, and unit franchising, with individual entrepreneurs owning one or more outlets.
Management contracts	Contractual relationship under which operational control of an asset in a host country is vested to an international firm, the contractor, which manages the asset in return for a fee.
Concessions	Contractual relationship under which operational control of an asset in a host country is vested to an international firm, the concessionaire. The firm manages the asset in return for an entitlement to (part of) the proceeds generated by the asset. Concessions are normally complex agreements, such as build-own-transfer (BOT) arrangements, which might include elements of investment by the TNC or ownership of the asset for a period. Legally they can be structured in many ways, including as public-private partnerships (PPPs). See also <i>WIR07</i> and <i>WIR08</i> .
Strategic alliances Contractual joint ventures	Contractual relationship between two or more firms to pursue a joint business objective. Partners may provide the alliance with products, distribution channels, manufacturing capability, capital equipment, knowledge, expertise, or intellectual property. Strategic alliances involve intellectual property transfer, specialization, shared expenses and risk. Contracts set forth terms, obligations, and liabilities of the parties but do not entail the creation of a new legal entity.

Source: UNCTAD.

^a The generic terms "subcontracting" and "OEM" will be avoided in this report as they are used in a number of different ways in the literature and business.

are similar to FDI in that they entail a "package" of assets, resources, technology and know-how to be put in the care of host-country firms, as in the case of contract manufacturing, outsourcing, franchising and concessions. Other NEM types are more "narrow asset transfers", as in the case of licensing, management contracts, or some sub-types of franchising such as distributor ships or agencies. This report focuses on NEMs where the relationship between TNCs and partner firms is relatively simple – essentially the first five types of NEM in table IV.2, from contract manufacturing to management contracts – to enable a relatively unambiguous analysis based around GVCs,

facilitating assessment of impact and policy issues. Strategic alliances, concessions and contractual joint ventures are complex NEM forms, with less clear-cut scope and implications meriting separate treatment. (Concessions in extractive industries and infrastructure, respectively, were dealt with in *WIR07* and *WIR08*.)

The defining features of NEMs – coordination and control of *independent firms* through contractual and non-contractual means, with a *material impact on the conduct of their business* – in some instances blur the rigid distinction between FDI, NEMs and trade. In some industries such as electronics, contract manufacturers are very large operators

and TNCs in their own right. For example, Inventec (Taiwan Province of China) designs, builds and internationally distributes electronics products for lead TNCs such as Apple (United States), Fujitsu-Siemens (Japan), and Lenovo (China); and it does this from production affiliates in countries such as Malaysia, Czech Republic and Mexico.

NEMs are therefore inextricably linked with international trade and FDI, shaping global patterns of trade in many sectors. In industry segments such as automotive components, consumer electronics, garments, hotels and IT and business process services, contract manufacturing and services outsourcing represent a very large share of total trade. NEMs are thus a major “route-to-market” for countries aiming at export-led growth, and a major point of access to TNC global value chains.

TNC governance, control and coordination of host-country operations through NEMs can be indirect. In contract farming, the numbers of individual suppliers are so great that arrangements with TNCs are made by intermediaries. For example, in 2008 Olam (Singapore) sourced 17 agricultural commodities from approximately 200,000 suppliers in 60 countries (most of them developing countries). Similarly, in 2008 food manufacturer Nestlé (Switzerland) had more than 600,000 contract farmers in over 80 developing and transition economies as direct suppliers of various agricultural commodities (WIR09). Contractual relationship between a TNC and host-country farmers can be channelled through associations of farmers, cooperatives or other intermediaries, which then establish conditions for the production of farm products. In the garments industry, large intermediaries such as Li & Fung (Hong Kong, China) arrange production in dozens of countries for branded clothing companies such as Gap (United States) via its long-standing relationship with independent contractors. Similarly, in franchising, extended networks of business outlets are often governed through a master franchisee that contracts rights for an entire market (a country

or region) in which it manages relationships with individual unit franchisees.

The *means of control* and the sources of bargaining power in NEM relationships vary by type. Partnerships are seldom equal, with power relationships depending on a range of factors which vary by NEM-type and industry, and include the capabilities and other assets possessed by TNCs and partner firms. In each NEM-type contractual levers of control are complemented with elements of soft bargaining power that strengthen TNCs’ governance of GVCs (table IV.3).

At the same time, partner companies in host countries possess or can develop “countervailing power”, often with the support of their government. Sources of such countervailing power on the part of NEM partners include specialized knowledge (including patents and other intellectual property), advanced productive capabilities (e.g. the ability to scale operations quickly), access to key assets or resources (including human resources) or know-how related to the local market of the NEM partner. This countervailing power can also be exercised in a number of ways, including in negotiations defining the terms of a contract.

Ultimately, it is the TNC which orchestrates the value chain. Thus, the most important source of TNC bargaining power, outweighing any countervailing forces that a host-country NEM may put forward, is its role as the coordinator of the GVC itself. This has implications for both partner firms and developing countries. The TNC’s governance of its integrated international production network and of the web of loosely dependent entities that make it up allows it to regulate access to the network and to set the conditions. Thus the segmentation or “fine-slicing” of value chains into ever more numerous and discrete activities that can be carried out by partner firms in any location plays into the hands of TNCs. It also makes them important interlocutors for policymakers aiming to stimulate the development of specific economic activities in specific locations, independent of whether such development is driven by FDI or domestic partners’ investment.

Table IV.3. TNCs' contractual levers and sources of bargaining power

Modes	Contractual levers of TNC control over host-country firms ^a	Sources of TNC bargaining power
Contract manufacturing Services outsourcing Contract farming	<ul style="list-style-type: none"> • Specifications for design, process, product or service, and quality • Commercial terms and capital expenditure obligations/assurances • Supply guarantees and restrictions on side-selling • Obligations to purchase specific inputs (e.g. seeds, fertilizer) • Obligations regarding the TNC's CSR practices 	<ul style="list-style-type: none"> • Access to the TNC internal market, guaranteed sales • Access to TNC know-how, supplies of inputs, logistics network • Existence of many potential contract suppliers
Licensing	<ul style="list-style-type: none"> • Obligations placed on the licensee restricting or conditioning the use of the intellectual property 	<ul style="list-style-type: none"> • Access to know-how, intellectual property • Access to the TNC internal market where part of a subcontracting arrangement • Existence of many competing licensees
Franchising	<ul style="list-style-type: none"> • Obligations placed on the franchisee conditioning the use of the intellectual property and the running of the business (e.g. use of the supply network, choice of suppliers, service levels, capital expenditure, CSR) 	<ul style="list-style-type: none"> • Access to the TNC supply and business support network • Market strength of established brand names • Existence of alternative choices of franchisees
Management contracts	<ul style="list-style-type: none"> • Obligations regarding the state and maintenance of the asset and future investments (capital expenditure obligations/assurances) 	<ul style="list-style-type: none"> • Access to TNC managerial competencies and know-how, supply network, and intellectual property

Source: UNCTAD.

^a Contractual arrangements also include obligations on the part of TNCs.

B. THE SCALE AND SCOPE OF CROSS-BORDER NEMs

NEMs are an important part of TNC-governed GVCs, and are growing rapidly. NEM activity is becoming ever more wide-spread geographically, though there are significant variations by mode and industry.

To assess the extent to which TNCs govern global value chains it is no longer sufficient to consider equity ownership (FDI) alone as a control mechanism.

However, analysing non-equity modes is complex, because the web of directly owned, partially owned, contract-based and arm's-length forms of international operation of TNCs is tangled, and some of the distinctions between the different modes are blurred. Moreover, the relationship between FDI, NEMs and trade is also intertwined in many GVCs.

In electronics contract manufacturing, for example, most of the top players, primarily from developing economies, have become TNCs in their own right. From the perspective of developing host countries, the activities of such firms are equivalent to FDI,

even if their productive capacity is employed to serve other TNCs. However, their NEM identity is vital information for policymakers – all the more so because such operations generate significant amounts of trade. Including the activities of such contract manufacturers in the measurement of non-equity modes of internationalization risks some “double-counting” between FDI and NEMs. Nevertheless, their inclusion in this section is essential in order to understand the nature and extent of value chain governance by individual TNCs.

Measuring the scale and scope of cross-border NEMs is crucial to our understanding of the overall development of world trade and investment. Recognizing the complexity of NEMs and their interconnections with other aspects of TNC operations, the aim here is to establish a baseline to evaluate NEMs in a number of dimensions (box IV.2 describes the methodology used for the analysis and calculations). The overall methodology

Box IV.2. Methodological note

Measurement of NEM activity is difficult, given the lack of national and international statistics that cover NEM-specific transactions. In order to provide some sense of the scale and scope of NEM activity worldwide, and specifically cross-border activities, UNCTAD employed a three-step methodology to establish estimates for *WIR11*.

First, the prevalence of various forms of NEMs was mapped across industries. For example, contract manufacturing is most prevalent in industries such as electronics, automotive parts, garments, footwear etc. Where possible, overall NEM activity, measured by sales or exports, was gathered for all industry/mode combinations:

- In some cases (contract manufacturing in electronics, automotive components, and pharmaceuticals; services outsourcing; franchising; and management contracts in hotels) estimates of global activity were obtained from recognized industry analysts, industry associations or consultancy firms. These estimates were then refined by analysing the major players in each market and adjusting total NEM sales by an appropriate internationalization ratio to derive cross-border sales.
- In cases where NEM estimates do not exist in any form (contract manufacturing in garments, footwear, and toys) cross-border sales were estimated by taking world exports of those goods, subtracting re-exports, and applying an estimate of the share of exports related to the given mode/industry combination based on industry interviews and industry reports.

Second, value added related to cross-border NEM sales was estimated in most cases by applying the ratio of value added (calculated as the sum of pre-tax income, personnel costs, and amortization/depreciation) to sales generated from a sample of representative companies in each industry. For franchising, the data was obtained through national franchise associations.

Third, employment estimates, both total and in developing and transition economies, were also derived for each mode/industry combination:

- In cases where the players in a given industry/mode combination are highly concentrated (contract manufacturing: electronics, automotive components, and pharmaceuticals; and management contracts in hotels), the estimate of cross-border employment was constructed by taking the sum of their employment and inflating it by their share in the global NEM market for their industry/mode and applying an internationalization ratio. Estimates of employment in developing and transition economies were derived by applying the share of assets or employment in these economies for the largest players to the total employment estimate.
- In cases where the concentration of players is low (contract manufacturing: garments, footwear, and toys) total employment was estimated by using industrial data from UNIDO to determine worldwide employment in a given industry (2007 data, or latest available year) and applying industry-specific ratios related to the share of production destined for export and an estimate of the share of exports related to the given mode/industry combination. Estimates of employment in developing and transition economies were derived by applying the ratio of worldwide employment located in these economies to the total employment estimate.
- Data for franchising and IT services and business process outsourcing were obtained from national associations and from industry reports. For franchising, an internationalization ratio (share of franchising activity carried out by foreigners) was applied to estimate cross-border NEM employment. For IT services and business process outsourcing, industry reports provided the necessary cross-border related employment. Estimates of employment in developing and transition economies were constructed using information from the same sources.

The data on major players used to derive estimates are included in annex tables IV.1–7.

Source: UNCTAD.

estimates a minimal size for NEMs, but the actual level is likely to be somewhat higher.

The various contractual forms included in our discussion – contract manufacturing, services outsourcing, contract farming, licensing, franchising and management contracts – are commonly also employed between firms within the same country. This section focuses only on those NEM activities that cross borders. Linkages between foreign

affiliates and local firms that take the form of NEM contracts⁵ are, for the most part, excluded from the data presented here.

The usage of NEMs in firm internationalization is common across many industries and in every segment of GVCs. This ubiquity creates difficulties for analysis of the phenomenon, given the general lack of relevant statistics. The report limits its analysis to a number of industries in which NEMs

are especially important; and in some cases, to particular stages of a GVC, for similar reasons.⁶ Finally, firms sometimes simulate internal markets, in which their affiliates compete with each other or with outside suppliers for contracts. Because of this, contractual types such as licensing, contract manufacturing and management contracts are also commonly used within a TNC, i.e. between different legal entities of the same parent company. However, such intra-firm arrangements are excluded from the scope of cross-border NEMs in this report, as by definition they cannot be considered “non-equity”; and also because including them would again result in double-counting with FDI.

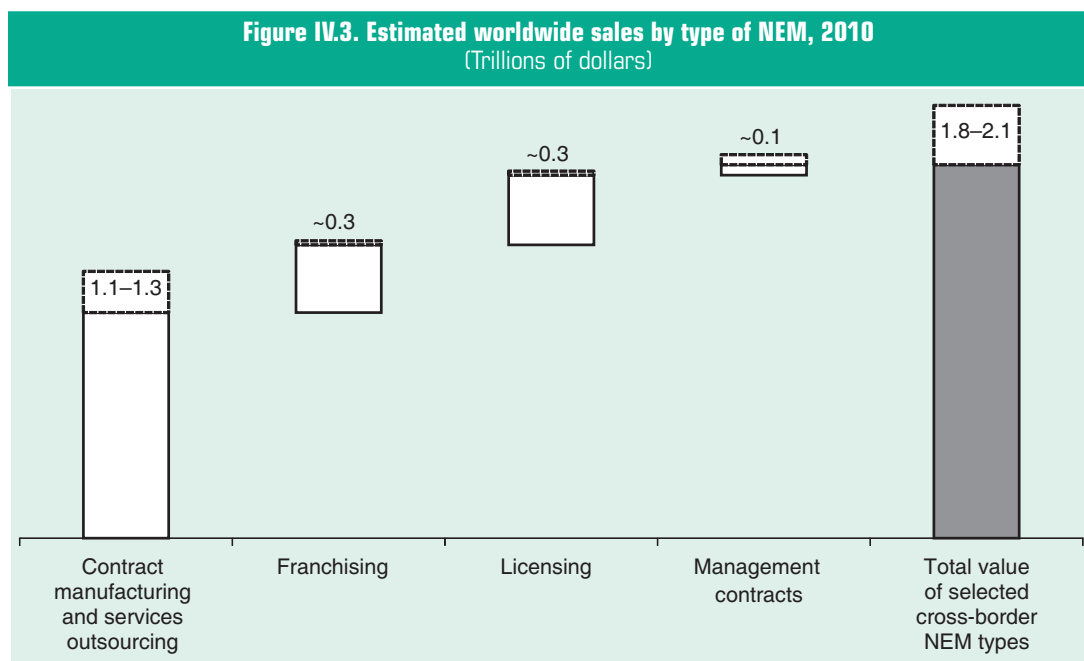
1. The overall size and growth of cross-border NEMs

Cross-border NEMs are worth at least \$2 trillion in sales globally, much of it in developing countries. In most cases, NEMs are growing more rapidly than the industries in which they operate.

Cross-border NEM activity worldwide is estimated to have generated about \$2 trillion of sales in 2010 in selected modes. Of this amount, contract manufacturing and services outsourcing accounted for about \$1

trillion, franchising for \$330–350 billion, licensing for \$340–360 billion, and management contracts for some \$100 billion (figure IV.3). These estimates are incomplete, including only the most important industries in which each NEM type is prevalent. The total also excludes other NEMs – principally contract farming – for which reliable data are not available. Other non-equity forms such as strategic alliances and concessions are not in the scope of this report, as explained in section IV.A.⁷

Contract manufacturing and services outsourcing as a whole clearly top the list on all major indicators, including total sales generated, value added, exports, worldwide employment and employment in developing countries as indicated by selected industries (table IV.4). Nevertheless, other NEM types are often significant on individual quantitative indicators (e.g. franchising, for employment generation in developing countries) or in terms of qualitative impacts (section D). Looking at major indicators by NEM type also hides significant differences by industry. Sales, value added and employment in more technology-intensive industries such as electronics, automotive components and pharmaceuticals, where contract manufacturing is concentrated in a number of major international



Source: UNCTAD estimates.

Note: See box IV.2 for the methodology used. The dotted area depicts the range estimates for each item. These figures include additional estimates not covered in table IV.4 for contract manufacturing (sporting goods, white goods, textiles, and electronics components) and management contracts (infrastructure services).

Table IV.4. Key figures of cross-border NEMs, selected industries, 2010^a
(Billions of dollars and millions of employees)

	Estimated NEM-related worldwide			
	Sales	Value added	Employment	Employment in developing economies
Contract manufacturing - selected technology/capital intensive industries				
Electronics	230–240	20–25	1.4–1.7	1.3–1.5
Automotive components	200–220	60–70	1.1–1.4	0.3–0.4
Pharmaceuticals	20–30	5–10	0.1–0.2	0.05–0.1
Contract manufacturing - selected labour intensive industries				
Garments	200–205	40–45	6.5–7.0	6.0–6.5
Footwear	50–55	10–15	1.7–2.0	1.6–1.8
Toys	10–15	2–3	0.4–0.5	0.4–0.5
Services outsourcing				
IT services and business process outsourcing ^b	90–100	50–60	3.0–3.5	2.0–2.5
Franchising				
Retail, hotel, restaurant, and catering, business and other services	330–350	130–150	3.8–4.2	2.3–2.5
Management contracts - selected industry				
Hotels	15–20	5–10	0.3–0.4	0.1–0.15
		Estimated NEM-related worldwide		
		Fees	Associated sales	Associated value added
Licensing				
Cross-industry		17–18	340–360	90–110

Source: UNCTAD estimates.

^a Data for 2010 or latest available year.

^b For data reliability reasons this estimate only reflects pure cross-border sales and is therefore an underestimate of NEM activity in this industry.

Note: See box IV.2 for the methodology used. All figures are cross-border, inter-firm NEM only.

operators, are different from those in traditional labour-intensive industries such as garments, footwear and toys, which are characterized by large numbers of smaller producers, at best aggregated under international operators specializing in GVC coordination. Equally, grouping businesses as diverse as retail, quick-service restaurants and business services under the single banner of franchising undoubtedly hides wide variations in value added and employment.

There are large variations in relative size. In the automotive industry, contract manufacturing accounts for 30 per cent of global exports of automotive components and a quarter of employment. In contrast, in electronics, contract manufacturing represents a much larger share of trade and employment. In labour-intensive industries such as garments, footwear and toys, contract manufacturing is even more important.

Putting different modes of international production in perspective, cross-border activity related to

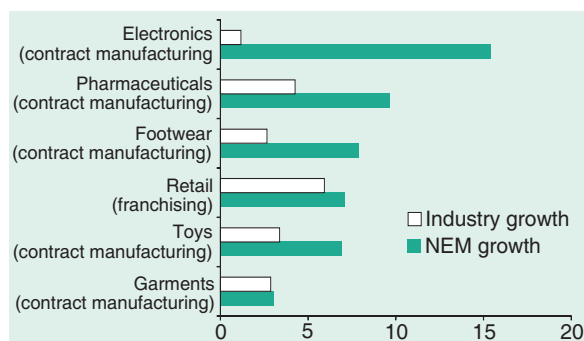
selected NEMs of \$2 trillion compares with exports of foreign affiliates of TNCs of some \$6 trillion in 2010. However, NEMs are particularly important in developing countries, which in many industries account for almost all NEM-related employment and exports, compared with the developing country share in global FDI stocks of 30 per cent and in world trade of less than 40 per cent. NEMs are also growing rapidly. In most cases, the growth of NEMs outpaces that of the industries in which they operate (figure IV.4).

2. Trends and indicators by type of NEM

a. Contract manufacturing and services outsourcing

Contract manufacturing and services outsourcing relationships across borders are extensive. They knit together the widely dispersed activities of many of the largest TNCs in the world. The bulk of integrated international manufacturing occurs within

Figure IV.4. Comparative growth rates of NEMs' sales, selected industries, 2005-2010
(Per cent)



Source: UNCTAD estimates.

Note: Global industry growth estimates based on industry market research from Ibisworld (garments and footwear) and Datamonitor (all others). Estimates for NEM growth are based on data for the 10 largest contract manufacturers in each industry, except for franchising in retail, which is based on data available for 24 countries.

Contract manufacturing/ services outsourcing, franchising and licensing are among the largest NEMs in terms of sales and employment. Other NEMs – such as contract farming and management contracts – are significant in various ways.

the confines of TNCs' global operations, manifesting itself through significant levels of intra-firm trade. Contract manufacturing with third parties, however, has grown rapidly in the past decade as TNCs move towards network forms of operation. Globally, UNCTAD estimates that the

market for contract manufacturing and services outsourcing combined was in the range of \$1.1–1.3 trillion in 2010 (figure IV.3).

The use of contract manufacturing varies considerably across industries (figure IV.5). For instance, the toys and sporting goods, electronics and automotive industry are major users of contract manufacturing, outsourcing more than 50 per cent share of cost of goods sold. Contract manufacturing, in industries such as pharmaceuticals, on the other hand, is relatively new and is still small measured as a percentage of cost of goods sold.

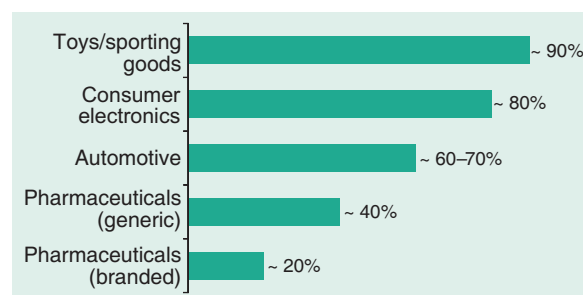
The nature and origin of NEM players, the geographical dispersion of NEM operations and their scale and industrial concentration differ by industry. For example, whereas contract manufacturers in electronics and IT-BPO services

(information technology and business process outsourcing) are major TNCs in their own right, with large-scale operations in a relatively small number of locations worldwide, those in industries such as garments and footwear are relatively small firms in low-cost locations with a very wide geographical dispersion (tables IV.5 and IV.6).

In technology and capital-intensive industries a small number of NEMs – often TNCs – dominate. In automotive components, pharmaceuticals and IT-BPO, companies from developed countries are the largest contract manufacturers, while in electronics and semiconductors the situation is more mixed, but with developing country companies the more significant (tables IV.5 and IV.6). In the case of labour-intensive industries such as garments, footwear and toys, however, a number of developing country TNCs act as intermediaries or agents between lead TNCs and NEMs, managing the manufacturing part of the GVC. Many of these intermediaries, such as Li & Fung Ltd (Hong Kong, China), have evolved from NEM roots.

The examination of contract manufacturing in electronics, garments and IT-BPO that follows is illustrative of the various patterns of evolution, activity and geographic dispersal, which depend on the nature of industries and other conditions.

Figure IV.5. Use of contract manufacturing by selected industries, estimated share of cost of goods sold



Source: Polastro (2009).

Contract manufacturing in the *electronics industry* evolved early. Offshoring up to the mid-1980s took the form of manufacturing FDI, as TNCs took advantage of cheaper, relatively skilled labour⁸ in host countries to process and assemble intermediate goods for shipping back to their home economies. In the latter part of the

1980s, a number of electronics companies started shedding manufacturing operations to concentrate on R&D, product design and brand management. The manufacturing was taken up by electronics manufacturing services (EMS) companies, including Celestica, Flextronics and Foxconn. Some of these emerged from existing suppliers, especially those based in Taiwan Province of China (e.g. Foxconn); others were spinoffs,⁹ such as Celestica from IBM (McKendrick, Doner and Haggard, 2000; Sturgeon and Kawakami, 2010).

A small number of contract manufacturers now dominate the industry, with the largest 10 by sales accounting for some two-thirds of the EMS activity. They produce for all major brands in the industry, from Dell and Hewlett-Packard in computing to Apple, Sony and Philips in consumer electronics (annex table IV.1), with overall sales in electronics

contract manufacturing amounting to \$230–240 billion in 2010 (table IV.4).

All but three of the top 10 players in electronics contract manufacturing are headquartered in developing East Asia – the bulk of manufacturing production in the industry is centred on East and South-East Asia, particularly China. During the last decade, however, contract manufacturing firms in the industry have accelerated their spread to other regions, often by purchasing manufacturing facilities from lead TNCs. This has made them into large TNCs in their own right. Today, they own and run hundreds of facilities in developing economies that lie beyond their region of origin, including Brazil, India, Mexico and Turkey (annex table IV.1). In addition to these large global NEM firms, there are many smaller contract manufacturers in the industry, both established and emerging, in

Table IV.5. Major developing economy players in contract manufacturing and services outsourcing, 2009

(Billions of dollars and thousands of employees)

Company name	Sales	Employment	Company name	Sales	Employment
Electronics			Garments		
Foxconn/Hon Hai (Taiwan Province of China)	59.3	611	Youngor Group Co. Ltd (China)	1.8	47
Flextronics (Singapore)	30.9	160	Luen Thai (Hong Kong, China)	0.8	20
Quanta (Taiwan Province of China)	25.4	65	Makalot Industrial (Taiwan Province of China)	0.4	21
Compal (Taiwan Province of China)	20.4	58	Tristate (Hong Kong, China)	0.4	15
Wistron (Taiwan Province of China)	13.9	39	High Fashion International (Hong Kong, China)	0.3	12
Automotive components			Footwear		
LG Chem (Republic of Korea)	13.1	8	Pou Chen (Taiwan Province of China)	6.5	333
Hyundai Mobis (Republic of Korea)	11.2	6	Stella International (Taiwan Province of China)	1.0	50
Mando (Republic of Korea)	2.1	4	Feng Tay (Taiwan Province of China)	0.8	68
Nemak (Mexico)	1.9	15	Symphony (Hong Kong, China)	0.2	14
Randon (Brazil)	1.4	10	Kingmaker Footwear (Hong Kong, China)	0.2	12
Pharmaceuticals			Toys		
Piramal Healthcare (India)	0.7	7	Kader (Hong Kong, China)	0.2	20
Jubilant Life Sciences (India)	0.7	6	Herald (Hong Kong, China)	0.2	8
Divi's Laboratories (India)	0.2	1	Lerado Group (Hong Kong, China)	0.2	5
Dishman Pharmaceuticals (India)	0.2	1	Dream International (Hong Kong, China)	0.1	9
Hikal (India)	0.1	1	Matrix (Hong Kong, China)	0.1	9
Semiconductors			IT-BPO		
TSMC (Taiwan Province of China)	9.2	26	Tata Consultancy Services (India)	5.2	160
UMC (Taiwan Province of China)	2.9	13	Wipro (India)	4.2	108
Chartered Semiconductor (Singapore)	1.5	4	China Communications Services (China)	2.7	127
SMIC (China)	1.1	10	Sonda (Chile)	0.9	9
Dongbu HiTek (Republic of Korea)	0.4	3	HCL Technologies (India)	0.8	54

Source: UNCTAD

Note: Data refers, where possible, to sales and employment associated with cross-border NEM activities.

Table IV.6. Top 10 players in contract manufacturing and services outsourcing, selected industries, 2009

(Billions of dollars and thousands of employees)

Company name	Sales	Employment	Company name	Sales	Employment
Electronics					
Foxconn/Hon Hai (Taiwan Province of China)	59.3	611	Inventec (Taiwan Province of China)	13.5	30
Flextronics (Singapore)	30.9	160	Jabil (United States)	13.4	61
Quanta (Taiwan Province of China)	25.4	65	TPV Technology (Hong Kong, China)	8.0	24
Compal (Taiwan Province of China)	20.4	58	Celestica (Canada)	6.5	35
Wistron (Taiwan Province of China)	13.9	39	Sanmina-SCI (United States)	5.2	32
Automotive components					
Denso (Japan)	32.0	120	LG Chem (Republic of Korea)	13.1	13
Robert Bosch (Germany)	25.6	271	Faurecia (France)	13.0	58
Aisin Seiki (Japan)	22.1	74	Johnson Controls (United States)	12.8	130
Continental (Germany)	18.7	148	Delphi (United States)	11.8	147
Magna International (Canada)	17.4	96	ZF Friedrichshafen (Germany)	11.7	60
Pharmaceuticals					
Catalent Pharma Solutions (United States)	1.6	9	Jubilant Life Sciences (India)	0.7	6
Lonza Group (Switzerland)	1.3	4	NIPRO Corp. (Japan)	0.6	10
Boehringer Ingelheim (Germany)	1.1	6	Patheon (Canada)	0.5	4
Royal DSM (Netherlands)	1.0	4	Fareva (France)	0.4	5
Piramal Healthcare (India)	0.7	7	Haupt Pharma (Germany)	0.4	2
Semiconductors					
TSMC (Taiwan Province of China)	9.2	26	Dongbu HiTek (Republic of Korea)	0.4	3
UMC (Taiwan Province of China)	2.9	13	VIC (Taiwan Province of China)	0.4	3
Chartered Semiconductor (Singapore)	1.5	4	TowerJazz (Israel)	0.3	2
Globalfoundries (United States)	1.1	10	Samsung Electronics (Republic of Korea)	0.3	..
SMIC (China)	1.1	10	IBM Microelectronics (United States)	0.3	..
IT-BPO					
International Business Machines (United States)	38.2	190	NTT Data Corp. (Japan)	8.9	35
Hewlett-Packard (United States)	34.9	140	Computer Sciences Corporation (United States)	6.5	45
Fujitsu (Japan)	27.1	18	Cap Gemini (France)	6.1	109
Xerox (United States)	9.6	46	Dell (United States)	5.6	43
Accenture (Ireland)	9.2	204	Logica (United Kingdom)	5.5	39

Source: UNCTAD, based on annex tables IV.1, 2, 3, 5 and 7.

Note: Data refers, where possible, to sales and employment associated with cross-border NEM activities.

locations around the world which are important players in local value chains. These firms lack the global footprint of the top players and their close interaction with major lead TNCs in the electronics industry; instead many act as second- and third-tier suppliers to the large NEM players in the industry.

The *garment and footwear industries* have a long history of contract manufacturing, especially by companies located in developing countries. Although there are large-scale developing country firms involved in contract manufacturing, such as Gama Tek (Turkey) or Alok Industries (India),

generally speaking contract manufacturing is a highly competitive industry typified by vast numbers of small suppliers servicing a limited number of international brands and retailers. Examples of the larger brands include Adidas (Germany), Christian Dior (France), and Nike (United States) (annex table IV.4); retailers include mass merchandisers such as Walmart (United States) and Marks and Spencer's (United Kingdom), and speciality retailers including Gap (United States) and H&M (Sweden).

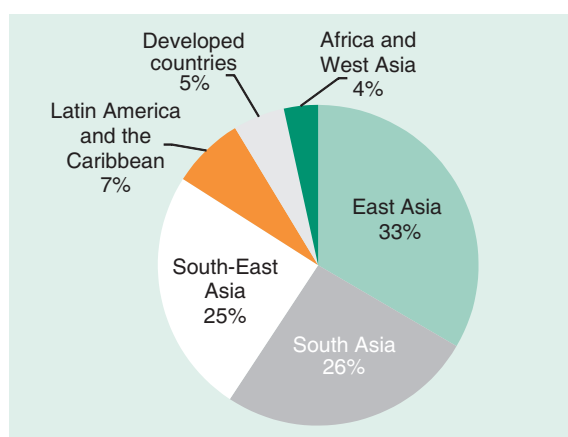
Contracts are often managed through agents or intermediate players (mostly from East Asia),

formerly contract manufacturers, which have evolved into providers of “value chain management services”, taking on board more and more elements of the value chain (e.g. design and outsourcing), and sometimes shedding their original manufacturing operations. This happened in the case of Li & Fung Ltd, which has 80 offices globally (many in developed countries, to work with and secure orders from major brand owners) and 12,000 suppliers under contract manufacturing arrangements in 40 developing economies. Some of the suppliers within such arrangements are themselves TNCs, for instance Hong Kong and Indonesian manufacturers with affiliates in (neighbouring) countries with lower labour costs such as Cambodia, Lao People’s Democratic Republic or Lesotho (Gereffi and Frederick, 2010; McNamara, 2008).

The size of the market in contract manufacturing of garments, by sales, is some \$200–205 billion (table IV.4), with production occurring in widely dispersed locations in Africa, Asia and Latin America. The location of factories used by Gap Inc (United States) is a good reflection of this spread (figure IV.6).

Beyond the manufacturing elements of TNCs’ value chains, increasing fine-slicing of business functions, including corporate and support activities (e.g. back-office functions or customer services), has fuelled a surge in the outsourcing of services.

Figure IV.6. Location of factories used by Gap Inc, 2009



Source: UNCTAD, based on company report.

Services outsourcing began as an “onshore” activity in information technology in the 1990s, but rapidly shifted to offshore markets, especially in developing and transition economies. The facility to separate location of production and related services arising from the information and communication technology (ICT) revolution hastened the extension of services outsourcing and offshoring to a range of business processes and other knowledge processes such as market research, business intelligence and R&D (Gereffi and Fernandez-Starck, 2010).

UNCTAD estimates that the global scale of services outsourcing exports, mostly IT-BPO, was around \$90–100 billion in 2009 (table IV.4). This may be a considerable underestimate, with other valuations ranging up to \$380 billion or more,¹¹ although the higher figures often include elements such as services outsourcing by TNC affiliates. Because of its development out of ICT and knowledge activities, the industry is dominated by major developed country players such as Accenture (Ireland), Cap Gemini (France), Hewlett-Packard (United States), IBM (United States), and NTT Data (Japan) (table IV.6). The largest developing country firms providing services under contract to overseas clients are from India, including Tata Consultancy Services, Infosys Technologies and Wipro, with others dispersed from China to Chile (table IV.5).

The top developing country locations for outsourcing services (managed both by major developed country players and by local firms) are still in Asia. Three countries, India, the Philippines and China, accounted for around 65 per cent¹² of global export revenues related to IT-BPO services in 2009, partly because of locational advantages, such as specific language and IT skills, the low cost of labour, and ICT infrastructure. However, the industry is expanding to countries such as Argentina, Brazil, Chile, the Czech Republic, Egypt, Morocco and South Africa (AT Kearney, 2011; annex table IV.5). Unlike contract manufacturing, services outsourcing is tied to cities as locations, because of the need for knowledge workers and ready connectivity. A number of new city locations for services outsourcing are coming to the fore (table IV.7).

Table IV.7. Locations for global services outsourcing: top 10 established and emerging cities, 2010

Top 10 established cities	Top 10 emerging cities
Bangalore (India)	Krakow (Poland)
Mumbai (India)	Beijing (China)
Delhi (India)	Buenos Aires (Argentina)
Manila (Philippines)	Cairo (Egypt)
Chennai (India)	Sao Paulo (Brazil)
Hyderabad (India)	Ho Chi Minh City (Viet Nam)
Dublin (Ireland)	Dalian (China)
Pune (India)	Shenzhen (China)
Cebu City (Philippines)	Curitiba (Brazil)
Shanghai (China)	Colombo (Sri Lanka)

Source: Global Services, Destination Compendium 2010. Available at www.globalservicesmedia.com.

Note: The ranking of the cities is based on a range of quantitative and qualitative factors such as the number and quality of IT engineers and other skilled labour, the business environment, connectivity and infrastructure support, risk profiles and quality of life.

b. Franchising

Worldwide sales franchised enterprises reached nearly \$2.5 trillion in 2010 (table IV.8), of which the value of cross-border franchising was around \$330–350 billion (table IV.4). The share of international franchising varies significantly by country. In most developed markets domestic franchising accounts for 80–90 per cent of the total, but franchising has reached maturity in some major emerging markets as well. In Brazil, for example, foreign franchise chains represent only around 10 per cent of the total, all of the top 10 chains being domestic

franchises. However, initial growth of franchising in developing markets is often driven by international franchise operators. In most African markets, except for South Africa, international franchisors account for 80 per cent or more of the total, and in emerging markets such as Mexico, the Russian Federation and Turkey, the rate is still between 30 and 40 per cent.

The franchising formula is found in different sectors, and takes different forms. The most important franchising sectors are retail (including high-street retailing as well as grocery), restaurants (often quick-service restaurants), hotels, business services, as well as a diverse range of other services sectors, from education to personal care services. In developed countries the share of higher value added services tends to be higher; in the United States, for example, business and personal services account for 37 per cent of the total franchising sector. By contrast, in developing countries, micro-franchising (mostly one-person businesses) and lower value added services are more common. For example, in South Africa the most important franchising sector is quick-service restaurants, with a share of almost 25 per cent of franchised systems, followed by retail (also a limited value added sector) with 22 per cent. Similarly, in India the leading sector is retail, with a share of 32 per cent, followed by quick-service restaurants with 16 per cent.

Most large global franchising operators (franchisors) originate in developed countries, whether they are

Table IV.8. Franchise systems^a in the world, 2010

Region/economy	Franchise systems	Number of outlets (Thousands)	Sales (\$ billion)	Employees (Thousands)	Cross-border (Per cent) ^b
World	30 000	2 640	2 480	19 940	15
Developed economies	12 200	1 310	2 210	12 400	10
Europe	7 700	370	340	2 830	20
Japan	1 200	230	250	2 500	5
United States	2 500	630	1 480	6 250	5
Developing/transition economies	17 400	1 330	270	7 540	30
Africa	1 600	40	30	550	70
Latin America and the Caribbean	3 800	190	70	1 810	20
Asia	11 200	1 070	170	4 810	25
South-East Europe and the CIS	800	30	5	370	50

Source: UNCTAD estimates, based on a joint UNCTAD/World Franchise Council survey of national franchise associations.

^a A franchise system consists of all the franchised units and units managed by the franchisor itself that operate under the same banner and business format, for example the McDonalds franchise system.

^b Refers to the share of cross-border outlets in the total number of outlets.

international retailers expanding through franchise networks, luxury brands expanding internationally on the high street, in shopping malls and at airports, or restaurants transplanting their successful formulas to new markets as consumers develop an “international taste”. The top 15 global franchisors by number of outlets are all United States firms, apart from one company each from Japan, Canada and the United Kingdom (annex table IV.6). Most of these 15 firms are fast-food chains such as McDonald’s (United States) and Pizza Hut (United States). The remaining companies out of this group are essentially convenience stores or hotels, including 7-Eleven (Japan) and InterContinental (United Kingdom).

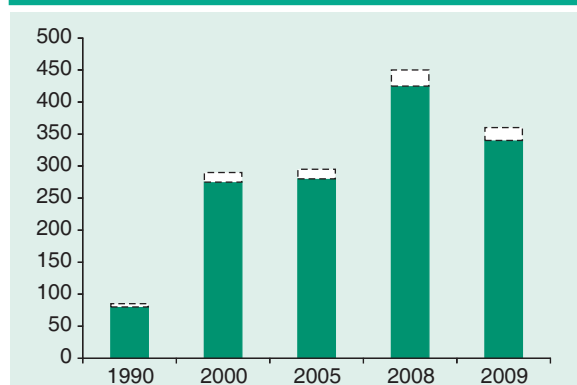
Global franchise chains are frequently widely dispersed, with many franchisees in developing countries. For example, KFC (United States) has franchisees in about 110 countries globally, of which some 75 are developing economies; the equivalent numbers for Holiday Inn are over 100 and 80. The choice of location is driven by market size, which is reflected in the top franchising country locations.

c. Licensing

International licensing spans a wide range of industries and activities, touching on nearly every step of many industries’ global value chains. UNCTAD estimates that cross-border NEM-related licensing resulted in sales of \$340–360 billion in 2010 (figure IV.7). NEM-related licensing has grown steadily since 1990, registering a steady 10 per cent average annual growth rate as measured by estimated sales up to 2008, although there was a decline in 2009 because of the financial and economic crisis.

Balance of payments statistics suggest that licensing activity directed at developing markets increased markedly in the past decade, though developed economies continue to dominate. Global royalty payments are indicative of licences received (and hence the location of NEM partners to TNCs) and, on this basis, developing and transition economies now pay out roughly a quarter of global royalty fees (table IV.9). The geographical dispersal of licensees (based on royalty payments) is wide, although South, East,

Figure IV.7. Estimated sales related to cross-border inter-firm licensing, various years
(Billions of dollars)



Source: UNCTAD estimates.

Note: The dotted area depicts the range estimates for each year. Data from the United States was used to calculate the amount of cross-border inter-firm licensing associated with industrial processes and trade marks. This number was scaled-up to the world total by using the share of the United States in world licensing receipts.

Table IV.9. Royalties and licence payments by selected developing and transition economies, 2005, 2008, 2009
(Billions of dollars)

Region/economy	2005	2008	2009
World	143.4	204.2	197.4
Developed economies	113.1	153.5	149.2
Developing and transition economies	30.3	50.7	48.2
Africa	1.6	2.5	2.5
South Africa	1.1	1.7	1.6
Egypt	0.2	0.3	0.3
Nigeria	0.1	0.2	0.2
Latin America and the Caribbean	3.3	6.5	6.1
Brazil	1.4	2.7	2.5
Argentina	0.7	1.5	1.5
Mexico	0.1	0.6	0.5
Chile	0.3	0.5	0.5
Asia and Oceania	23.1	35.8	34.4
West Asia	0.5	1.1	1.0
Turkey	0.4	0.7	0.6
Iraq	0.0	0.4	0.3
South, East and South-East Asia	22.7	34.7	33.5
Singapore	9.3	12.5	11.6
China	5.3	10.3	11.1
Taiwan Province of China	1.8	3.0	3.4
Thailand	1.7	2.6	2.3
India	0.7	1.5	1.9
South-East Europe and the CIS	2.3	5.9	5.2
Russian Federation	1.6	4.6	4.1
Ukraine	0.4	0.8	0.6
Croatia	0.2	0.3	0.2

Source: UNCTAD, based on IMF’s balance-of-payment statistics.

and South-East Asia comprised nearly 70 per cent of the total from developing and transition economies in 2009, followed by Latin America and the Caribbean, South-East Europe and the CIS, Africa, and West Asia. Within each region there is a high concentration of licensing activity in a few countries, e.g. South Africa and Egypt in Africa; Brazil and Argentina in Latin America; and Turkey in West Asia. This is slightly less the case for East, South and South-East Asia, with Singapore, China and Taiwan Province of China most involved as licensing partners.

d. Other modalities

In addition to contract manufacturing, services outsourcing, franchising and licensing, discussed above, there are many other NEMs – such as management contracts and contract farming – for which overall scale is difficult to estimate (reliable data are often unavailable), but which are nevertheless large and important from a development perspective. In the case of cross-border management contracts, UNCTAD estimates sales of \$100 billion (figure IV.3) in an eclectic range of industries from hotels (box IV.3) to infrastructure services, such as electricity and water distribution. The management contract element in infrastructure is often a sub-element of a more complex

agreement.

Although there is no available figure for the overall scale of cross-border contract farming, a key NEM in terms of development impact (section D), it is widespread. TNCs utilize contract farming in over 110 developing and transition economies, and this involves a large range of agricultural commodities. This NEM is a significant feature of many TNC GVCs, including food and beverages, biofuels and retail (supermarkets). Contract farming plays an important role in underpinning agricultural production and related activities (*WIR09*):

- In Brazil about 75 per cent of poultry and 35 per cent of soya bean production are sourced through contract farming.
- In Kenya, about 60 per cent of tea and sugar – and nearly all of cut flower exports – are produced through contract farming arrangements.
- In Mozambique a majority of the 400,000 contract farmers are smallholders.
- In Viet Nam some 90 per cent of cotton and fresh milk, 50 per cent of tea and 40 per cent of rice are sourced through this mode.
- In Zambia 100 per cent of cotton and paprika are produced through contract farming.

Box IV.3. The use of management contracts in the hotel industry

The international hotel industry is a good example of how TNCs vary their use of internationalization modes depending on circumstances. Historically, hotel chains have favoured franchising as a mode of expansion, both domestically and internationally. Hotel groups largely stick to franchising in more mature markets, while they have a stronger preference for management contracts (and ownership, i.e. FDI) in developing markets. They also exhibit a preference for management contract when it comes to luxury and upscale hotels – categories with a larger share in hotel group portfolios in developing markets, compared to mature markets.

Globally, eight of the 10 largest hotel groups use management contracts. The average share of management contracts in the global branded market (by number of rooms) is around 28 per cent (24 per cent for the top 10 groups). Among the top 10 groups Hyatt makes the most use of this mode (53 per cent share in rooms), and Marriot accounts for the highest amount of sales associated with management contracts (\$8.9 billion). These chains combined have 41 per cent of their operations abroad. The resulting share of management contracts in sales abroad by the top 10 groups provides an estimate of \$16 billion; and by branded hotels of \$19 billion. UNCTAD estimates that cross-border management contracts employ 233,000 people in the top 10 chains and 353,000 for the entire branded market. These figures most likely understate the employment impact in developing countries, as employment intensity in those markets is much higher due to low labour costs and more services provided in-house (box table IV.3.1; MKG Hospitality, 2011).

Box table IV.3.1. Top 10 hotel groups, 2010

Group	Home economy	Number of rooms	Estimated hotel system sales	Estimated hotel system employment	Internationalization (Per cent)	Franchising (Per cent)	Management contracts (MC) (Per cent)	Total sales MC	International employment MC
IHG InterContinental Hotels Group	United Kingdom	647 161	18 700	335 000	90	74	25	4 701	75 786
Marriot International	United States	618 104	19 691	300 000	20	53	45	8 860	27 00
Wyndham Hotel Group	United States	612 735	7 169	315 970	25	96	1	47	519
Hilton Hotel Corp.	United States	587 813	18 757	303 118	17	69	26	4 885	13 082
Accor	France	507 306	10 083	261 603	75	24	22	2 208	42 728
Choice Hotel International, Inc.	United States	495 145	6 538	145 000	15	100	-	-	-
Starwood Hotel & Resorts Worldwide	United States	308 736	12 260	159 206	43	39	52	6 323	35 353
Best Western International	United States	308 477	6 931	145 000	39	100	-	-	-
Carlson Hotels Worldwide	United States	159 756	4 844	160 000	55	65	21	1 017	18 541
Hyatt Hotels Corp.	United States	127 507	5 124	130 000	30	16	53	2 716	20 376
Total top 10 hotel groups	-	4 372 740	110 101	2 254 898	41	68	22	30 760	233 488

Source: UNCTAD estimates, based on company and consultancy reports.

Note: Sales are the gross sales of the global hotel system, including sales generated by franchised and managed hotels. The share of management contracts is the proportion of rooms in hotels under management contracts in the total number of rooms.

Source: UNCTAD.

C. DRIVERS AND DETERMINANTS OF NEMs

1. Driving forces behind the growing importance of NEMs

NEMs are driven by a number of factors, including their relatively lower upfront capital requirements, reduced risk exposure and greater flexibility in adapting to change, allowing TNCs to leverage their core competencies.

The use of non-equity modes in international production by TNCs has increased rapidly over the last decade. The growth of NEMs has outpaced the growth of FDI, the traditional means

of overseas expansion for TNCs. They have also expanded faster than the average in those sectors in which NEMs are most prevalent (section IV.B). The rapid growth of NEMs as a means of internationalization can be explained by both firms' strategic choices and a number of enabling factors.

The choice on the part of firms to expand overseas through the use of NEMs is based on a number of key advantages they possess (table IV.10). Overall, these advantages, without nuancing them by type of NEM, are: (1) the relatively lower upfront capital expenditure and working capital needed for operation; (2) related to this, the reduced risk exposure; (3) greater flexibility in adapting to changes in the business cycle and in demand; and (4) the externalization of non-core activities that can be carried out at lower cost or more effectively by other operators.

These core advantages of NEMs for firms indicate that the growth of NEMs as a means of internationalization is likely to persist. The ever-present attention of shareholders on return on capital employed (ROCE),¹³ the need for firms to de-leverage in the post-crisis world, and greater risk-aversion all increase the relative attractiveness of NEMs, as these modes require less capital. The greater awareness of the need to anticipate shocks in the business cycle makes the flexibility that contract manufacturers provide in changing production levels, or the shifting of market risks to partners through licensing or franchising, more important. In industries such as hotels, franchising and management contracts allow for much faster expansion of the brand than would be feasible when owning all properties. Finally, across industries the trend to focus on core competencies, externalizing parts of the value chain not considered central to other operations, will if anything accelerate, given the drive to ensure maximum efficiency along the value chain to serve emerging markets demanding low-cost versions of mature-market products and services.

There are also disadvantages and risks associated with NEMs. To start with, the externalization of any part of the value chain through the use of an NEM will cause a firm to capture less of the total value created in the chain. In addition, natural and structural market imperfections and resulting

Table IV.10. NEMs: key advantages and drivers of growth

Advantages of NEMs for TNCs	Drivers of the continuing growth of NEMs
Low upfront investment outlays and working capital	<ul style="list-style-type: none"> Increasing focus on return on capital employed (ROCE) and need to de-leverage Ever greater levels of capital expenditure required for expansion of production and entering new markets
Limited risk exposure	<ul style="list-style-type: none"> Increasing market and political risk-aversion Limitation of legal liability
Flexibility	<ul style="list-style-type: none"> Increasing awareness of the need to anticipate cyclical shocks
Leveraging of core competencies	<ul style="list-style-type: none"> Increasing value-chain segmentation, combined with improving knowledge codification, prevalence of industry standards and improving IP regimes as enabling factors Growing availability of sophisticated NEM partners in emerging markets capable of providing core (e.g. design facilities) and non-core activities efficiently and effectively

Source: UNCTAD.

transaction costs can make NEMs less attractive. This is balanced by the relative profitability of other segments of the value chain and by potential cost advantages that can be obtained through the externalization of activities (e.g. to low-cost providers and locations). Risks associated with NEMs stem from a lower degree of control over processes, with potential implications for quality and service levels (e.g. on-time delivery), and over technology, skills, or other forms of intellectual property transferred to a partner. The purpose of the contract establishing the NEM partnership is to address precisely these disadvantages and risks, from the TNC's perspective, setting out the parameters for the sharing of value and profits, and including clauses to mitigate the risks for both parties.

In addition to the trends pushing TNCs towards a greater use of NEMs, a number of enabling factors are facilitating their growth. The increasing fragmentation of production processes between locations, growing sophistication in codification of knowledge and prevalence of industry standards, improving intellectual property protection regimes worldwide, and growing capabilities and increasing availability of credible and technologically sophisticated partner firms in new markets are all contributing to NEM growth.

Due to the inherent advantages of NEMs and the factors enabling their development, TNCs appear to be increasingly choosing NEMs rather than FDI as a means of internationalization. However, TNCs make a deliberate choice between the two options only in some cases; frequently the use of NEMs is either opportunistic or is determined by a firm's business model, or by industry- and country-specific factors.

Where the use of NEMs is optional for TNCs, the choice between ownership and partnership is analogous to a "make or buy" decision (as discussed in section IV.A). For example, a pharmaceutical firm can either build its own plant to serve an overseas market, or grant a licence to a local manufacturer to do so, as in the case of GlaxoSmithKline's licensing of the drug Seretide to Hanmi in the Republic of Korea (Avafia, Berger and Hartzenberg, 2006; Berger et al., 2010). NEMs and FDI operations can also be developed in parallel. Many retailers operate

both directly owned and franchised stores in the same markets. For example, Carrefour operates most of its hypermarkets and larger supermarkets as directly owned stores, and uses franchising for some of its convenience stores in both developed countries (e.g. France, Italy) and emerging markets (e.g. Brazil)

In many cases a TNC's business model or plan may predispose it to use a particular mode. In the case of franchising, while the choice of using FDI remains, a business model that is built around the exploitation of intellectual property or product development core competencies leads some brand owners, such as Benetton, to use exclusively franchising for distribution in both domestic and foreign markets (Reid, 2008). In pharmaceuticals, the trend to outsource production stages along the pharmaceutical value chain in their home markets is leading TNCs to adopt the same lean model globally. For example, as part of Pfizer's outsourcing strategy, the company manages approximately 150 contract manufacturers around the world. A number of developing country companies, such as Laboratorios Phoenix (Argentina) have benefited from this process.¹⁴ In contract manufacturing, in some industries such as automobiles or electronics where the model is mature and contract manufacturers have themselves grown into large TNCs with strong competencies and cost advantages, it would be almost unthinkable for brand owners to invest in their own intermediate manufacturing facilities. For example, Denso (Japan), in automotive parts, and Foxconn (Taiwan Province of China), an electronics contract manufacturer, have huge operations in many locations, as well as considerable investment in research (section D.4; Cattaneo, Gereffi and Staritz, 2010).

Industry and host economy factors can also necessitate the use of NEMs. The competitive advantages possessed by local businesses may make entry into a market through FDI unfeasible or a losing proposition. In a more extreme case, prohibitive restrictions on FDI as an entry mode into a host economy may foster greater use of NEMs by TNCs. For example, the cap on foreign ownership and restriction on retailing business in the Indian food retail sector has kept out or limited the nature of market entry by large international

retailers such as Walmart¹⁵ that exclusively operate fully owned stores; but the same policy has created an opportunity for Spar International (Germany), an international retail franchisor, to expand its network in the huge and expanding Indian consumer market (Ravichandran, Jayakumar and Samad, 2008). Restrictions on land ownership by foreign firms in India have also, in part, led to the use of contract farming by TNCs in order to secure supplies for the local or global value chains (Barrett et al., 2010).

Clearly the opposite is also possible: firm-, industry- or host country-specific factors may preclude the use of NEMs and dictate the choice of FDI in entering foreign markets. A TNC may have a business model and cost structure based on maximizing internal value added, or be dependent on full control over marketing or retail mix (product and price), which cannot be achieved in external structures. At the industry level, in highly knowledge-intensive sectors, and in those industries where knowledge still tends to be tacit and difficult to transfer to third parties, developing NEMs may not be feasible. And at the country level, where countries lack credible and capable local partners, or where local partners do not have access to capital, FDI may be the only feasible entry option.

Firms' preferences, enabling factors, and factors that predetermine the use of a particular mode of internationalization will play out in different ways

to drive the growth of different non-equity modes across industries. Table IV.11 summarizes the main drivers of growth for each mode.

2. Factors that make countries attractive NEM locations

The factors that make countries attractive locations for NEM operations are in many respects the same as for FDI operations. These factors, or locational determinants, are usually analysed for FDI in a standard framework (*WIR98*; *WIR10*) that encompasses a country's policies, business facilitation, and its general economic environment (table IV.12).

A stable policy environment conducive to business, including well-developed competition policy, trade and fiscal rules, is equally relevant for NEM operations as for direct invested operations. A number of FDI-specific locational determinants, such as rules regarding entry and operations, standards of treatment of foreign affiliates, and adherence to international agreements on FDI, are relevant only to the extent that TNCs aiming to enter a foreign market through the use of a non-equity mode may

NEM locational determinants consist of the policy framework, economic conditions and business facilitation. Such determinants are context- and mode-specific.

Table IV.11. Selected mode-specific drivers of international NEM growth

Mode	Drivers of growth
Contract manufacturing Services outsourcing	<ul style="list-style-type: none"> • Increasing fragmentation of production processes between locations • Easier codification and sharing of knowledge and increasing prevalence of industry standards • Improving intellectual property protection regimes • Growing presence of large and sophisticated potential partners
Licensing	<ul style="list-style-type: none"> • Strengthening intellectual property regimes • Increasing availability of sophisticated partners in emerging markets
Franchising	<ul style="list-style-type: none"> • Large emerging consumer markets moving from traditional to modern retail and services, leading to: <ul style="list-style-type: none"> - growth of demand exceeding the capacity of TNCs to expand through directly owned business networks - increasing "pull" of potential franchisors by willing entrepreneurs in rapidly growing emerging markets • Market saturation and high levels of competition in home countries
Management contracts	<ul style="list-style-type: none"> • Increasing number of passive property investors • Market saturation and high levels of competition in home countries
Contract farming	<ul style="list-style-type: none"> • Increasingly volatile commodity prices pushing TNCs to seek stable sources of supplies and predictability of costs • Rising concerns in many countries regarding foreign ownership of agricultural land

Source: UNCTAD.

Table IV.12. Locational determinants and relevance for FDI and NEMs

Relevant for FDI and NEMs	More relevant for FDI	More relevant for NEMs
Policy framework		
<ul style="list-style-type: none"> • Economic, political and social stability • Competition policy • Trade policy • Tax policy 	<ul style="list-style-type: none"> • Rules regarding entry and operations • Standards of treatment of foreign affiliates • International investment agreements • Privatization policy 	<ul style="list-style-type: none"> • Stable general commercial and contract law • Specific laws governing NEM contractual forms (e.g. recognizing licensing, franchising contracts) • Intellectual property protection
Business facilitation		
<ul style="list-style-type: none"> • Reduction of hassle costs (e.g. cost of doing business) 	<ul style="list-style-type: none"> • Investment promotion • Investment incentives • Provision of after-care • Provision of social amenities (e.g. quality of life) 	<ul style="list-style-type: none"> • Facilitation efforts aimed at: <ul style="list-style-type: none"> - upgrading of technological, quality, productivity standards of local firms - enterprise development, increasing local entrepreneurial drive, business facilitation - subsidies, fiscal incentives for start-ups - information provision, awareness-building on NEM opportunities with local groups - supporting minimum standards of working conditions and CSR in local firms
Economic determinants		
<ul style="list-style-type: none"> • Infrastructure • Market size and per capita income • Market growth • Access to regional and global markets • Country-specific consumer preferences • Access to raw materials • Access to low-cost labour • Access to skilled labour • Relative cost and productivity of resources/assets • Other input costs (e.g. transport, communications, energy) 	<ul style="list-style-type: none"> • Access to strategic assets: <ul style="list-style-type: none"> - created assets (e.g. technology, intellectual property) - strategic infrastructure 	<ul style="list-style-type: none"> • Presence of credible local entrepreneurs and business partners • Access to local capital

Source: UNCTAD.

have to establish a “foothold” operation to support the NEM business. Such a foothold can range from a minimal commercial presence, for example a purchasing and quality control organization to support outsourced manufacturing, or a marketing and customer service presence to support a licensed consumer business, to significant logistical support operations as in the case of franchisors of retail or quick-service restaurant businesses which need to provide supplies to franchised outlets. FDI-specific policies are also relevant where TNCs operate a mixed model, developing for example franchised outlets next to directly owned outlets, as in the case of McDonald’s in China, or where the NEM is combined with a limited equity stake held by the TNC, as in the case of the Jordanian pharmaceuticals company, JPM, which licenses technology to five ventures in Algeria, Egypt, Eritrea, Mozambique and Tunisia in which it also

holds equity stakes. JPM’s role in these ventures is primarily one of technical oversight, given the relatively low capacities of the local partners (UNCTAD, WHO and ICTSD, forthcoming).

In addition to the policy-related locational determinants considered standard for FDI, there are a number of factors specifically favouring the development of NEMs in host countries. These include a stable commercial and contract law, as NEMs are essentially a contract-based form of TNC engagement in a host economy; the specific laws that may govern NEMs in the country, such as laws recognizing and setting parameters for NEM contractual forms (e.g. franchising, contract farming); and the IP regime (see also section E.2).

Business facilitation, the second set of determinants, is equally important for the attraction of NEMs as for FDI. Some FDI-specific business facilitation

efforts are clearly less relevant, unless promotion activities and incentives are applicable more widely, for example where investment promotion agencies engage in matchmaking between foreign franchisors and local aspiring franchisees (about a quarter of IPAs do so, according to this year's IPA survey (section E.3). However, in addition to the business facilitation efforts considered standard for FDI, a number of measures are relevant for the development of NEMs.

Initiatives to upgrade technological, quality, or productivity standards of local firms, or to support minimum standards of working conditions and CSR, can all increase the pool of potential local NEM partners capable of engaging with TNCs (section E.2). For example, the Government of Malaysia introduced franchising-specific legislation, and undertook other measures which facilitated entry into the local economy by TNCs. Through various agencies it offers financial support to those setting up franchising businesses.¹⁶ In the case of services outsourcing, the Government of the Philippines contributed to strengthening the development of the call centre industry.¹⁷ The Government of Brazil has also provided incentives and institutional support to develop this industry.¹⁸

The economic determinants of the attractiveness of a country for NEM and FDI operations, the third area of determinants, again are very similar. For example, the size and growth of the market and the access to regional markets are equally important for NEM forms such as franchising or out-licensing as for their directly invested equivalents. The provision of basic infrastructure and the costs of transport, energy and communications are important for all businesses, although an adverse local infrastructure environment may be less of a deterrent for local entrepreneurs setting up a business to engage in an NEM relationship than for a foreign investor. The only economic locational determinant that is likely to be less relevant for NEMs is access to local strategic assets, which TNCs will aim to own outright.

The types of economic determinants that are especially relevant to NEMs include the presence of credible and capable local entrepreneurs and business partners and access to capital for local businesses (section E.2). Most NEMs, unlike FDI, generally require strong and sometimes sophisticated local partners that can shoulder risks transferred to them. For example, in the case of contract farming, farmer associations and

Table IV.13. Main locational determinants by type of NEM

Mode	Most relevant locational determinants
Contract manufacturing Services outsourcing	<ul style="list-style-type: none"> • Open trade policy, access (or preferential access) to international markets • Access to cheap labour (both unskilled and skilled); favourable relative costs and productivity of local resources • Strong intellectual property regime • Facilitation initiatives aimed at upgrading local technological capabilities
Licensing	<ul style="list-style-type: none"> • Strong intellectual property regime • Availability of skilled local labour • Stable commercial law and contract enforcement regime • Facilitation initiatives aimed at upgrading local technological capabilities • Market size and growth
Franchising	<ul style="list-style-type: none"> • Stable commercial law and contract enforcement regime • Availability of capable local entrepreneurs and access to local finance • Market size and growth • Business facilitation aimed at local entrepreneurial development and start-up incentives
Management contracts	<ul style="list-style-type: none"> • Stable commercial law and contract enforcement regime • Underperforming locally owned assets
Contract farming	<ul style="list-style-type: none"> • Access to agricultural and related resources (i.e. land, water) • Stable political and economic environment • Open trade policy, access (or preferential access) to international markets • Transport and storage infrastructure • Market size and growth (for local value chains)

Source: UNCTAD.

cooperatives offer a degree of sophistication and certainty to TNCs which not prevail in contracts with individual farmers (*WIROS*; Barrett et al., 2010). Access to capital for local firms is crucial, insofar as NEMs imply the development of a locally financed business, even if the very contractual engagement of the local partner in the NEM relationship generally works as a facilitator of access to finance with local banks or other financiers.

The relative importance of locational determinants varies by non-equity mode and industry. While all determinants contribute to the overall attractiveness of a country for any form of NEM, certain determinants are fundamental for the development

of specific modes. The most relevant locational determinants for each mode are summarized in table IV.13.

The choice between FDI and NEMs, insofar as it is a choice, is clearly one for firms to make. However, differences between the locational determinants of the two types of internationalization show that developing countries can influence that choice. Where host countries' efforts to become more attractive for foreign investors can be politically difficult or economically costly, as in the case of adhering to international investment agreements or providing tax incentives, the cost of improving locational determinants for NEMs can be lower.

D. DEVELOPMENT IMPLICATIONS OF NEMs

The development implications of NEMs vary according to the NEM type, the sector or industry and the value chain segments in which they take place. Individual contractual arrangements can also play a role, as do country-specific conditions and policy influences.

NEMs bring to a host country a package of tangible and intangible assets. The analytical framework for the assessment of their development impact is similar to that for FDI – it looks at employment, value added, exports, technology dissemination and social and environmental impacts, among others (table IV.14). In each of these areas NEMs can bring a number of benefits to a developing host country which, combined, can make a positive contribution to its long-term industrial development by supporting the build-up of productive capacity and improving access to international markets (Narula and Dunning, 2010).

Not all of the benefits that NEMs can bring are automatic; the extent to which they materialize will depend on the capabilities of local firms and on the balance of power between them and partner TNCs, as well as on the general policy framework in host countries. In addition, there are a number of concerns and risks associated with NEMs which need to be addressed, including substandard working conditions in some NEM facilities, a lack of

employment stability, and prolonged reliance on low value added activities or technological dependence on foreign firms.

1. Employment and working conditions

UNCTAD estimates that worldwide, some 18 to 21 million workers are directly employed in firms operating under NEM partnership arrangements in selected industries and value chain segments (section B). Most of the jobs created are in contract manufacturing, services outsourcing and franchising activities (figure IV.8). Around 80 per cent of NEM-generated employment is in developing and transition economies; especially in contract manufacturing and, to a lesser extent, services outsourcing. Beyond this, there is significant direct employment in other NEMs or industries, such as contract farming, as well as considerable indirect employment. The jobs created are both skilled and unskilled, depending on industry factors.

Contract manufacturing comprises two types of industry: “hi-tech” or technology-intensive industries such as electronics, semiconductors, auto components, pharmaceuticals; and “low-tech” or labour-intensive ones like garments, footwear and

NEMs can make a significant contribution to employment, but concerns remain about working conditions and stability of employment.

Table IV.14. Main development impacts of NEMs

Impact category	Highlights of findings
Employment generation and working conditions	<ul style="list-style-type: none"> • NEMs have significant job-creation potential: especially contract manufacturing, services outsourcing and franchising account for large shares of total employment in countries where they are prevalent • Working conditions have been a source of concern in the case of contract manufacturing based on low-cost labour in a number of countries with relatively weak regulatory environments • Stability of employment is a concern, principally in the case of contract manufacturing and outsourcing, as contract-based work is more susceptible to economic cycles
Local value added and linkages	<ul style="list-style-type: none"> • NEMs can generate significant direct value added, making an important contribution to GDP in developing countries where individual modes achieve scale • Concerns exist that contract manufacturing value added is often limited where contracted processes are only a small part of the overall value chain or end-product • NEMs can also generate additional value added through local sourcing, sometimes through "second-tier" non-equity relationships
Export generation	<ul style="list-style-type: none"> • NEMs imply access to TNCs' international networks for local NEM partners; in the case of those modes relying on foreign markets (e.g. contract manufacturing, outsourcing, management contracts in tourism) this leads to significant export generation and to more stable export sales • In the case of contract manufacturing this is partly counterbalanced by increased imports of goods for processing • In the case of market-seeking NEMs (e.g. franchising, brand-licensing, management contracts) NEMs can lead to increased imports
Technology and skills transfer	<ul style="list-style-type: none"> • NEM relationships are in essence a form of intellectual property transfer to a local NEM partner, protected by the contract • NEM forms such as franchising, licensing, management contracts, involve transfer of technology, business model and/or skills and are often accompanied by training of local staff and management • In contract manufacturing, local partners engaging in NEM relationships have been shown to gain in productivity, particularly in the electronics industry • NEM partners can evolve into important technology developers in their own right (e.g. in contract manufacturing and services outsourcing) • They can also remain locked into low-technology activities • NEMs, by their nature, foster local entrepreneurship; positive effects on entrepreneurship skills development are especially marked in franchising
Social and environmental impacts	<ul style="list-style-type: none"> • NEMs can serve as a mechanism to transfer international best social-and-environmental practices • They equally raise concerns that they may serve as mechanisms for TNCs to circumvent such practices
Long-term industrial capacity building	<ul style="list-style-type: none"> • Through the sum of the above impacts, NEMs can support or accelerate the development of modern local productive capacities in developing countries • In particular, NEMs encourage domestic enterprise development and domestic investment in productive assets and integration of such domestic economic activity into global value chains • Concerns need to be addressed especially in issues such as long-term dependency on foreign sources of technology; over-reliance on TNC-governed GVCs for limited-value-added activities; and "footlooseness".

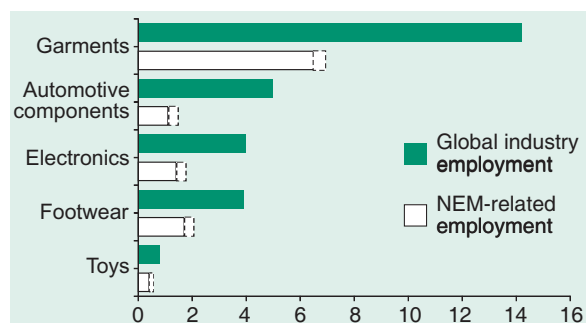
Source: UNCTAD.

toys. Among the first group of industries, activity is largely dominated by a relatively small group of major players with a worldwide employment footprint. In the electronics and semiconductor industries, the largest of these firms, mostly from developing economies, have a centre of gravity in East and South-East Asia, with a global web of factories in emerging economies in Latin America, Eastern Europe and elsewhere (table IV.6). Foxconn, a subsidiary of Hon Hai (Taiwan Province of China) and one of the largest electronics manufacturing services firms in the world, has nearly a million

employees in China alone, making it one of the single largest employers in the country.¹⁹

Contract manufacturing in the second group of industries is characterized by wide geographical dispersion. In garments, footwear and toys, roughly 90 per cent of NEM-related employment is located in developing and transition economies, including LDCs. For some of these countries, NEM-related activities generate significant employment. Contract manufacturing for major brands such as Nike (United States) and Hugo Boss (Germany), in particular, is an important generator of employment

Figure IV.8. Estimated global employment in contract manufacturing, selected industries, 2010
(Millions of employees)



Source: UNCTAD estimates.

Note: See box IV.2 for the methodology used. The dotted area depicts the range estimate for each item.

across the developing world (box IV.4). For example, there are about 376,000 workers in the Cambodian garments sector, where the vast bulk of production is carried out under contract manufacturing arrangements. In Sri Lanka, the garments industry employs some 400,000 people, many working under similar contractual arrangements.

In *services outsourcing* the employment impact is also large in India, the Philippines and a few other developing economies. For instance, IT-BPO is one of the largest contributors to a number of economies

in terms of GDP, exports and employment. By 2009, in India the sector had created some 2.2 million direct jobs and indirectly impacted the lives of about 8 million people;²⁰ in Chile, the outsourcing services industry in 2008 employed 20,000 people;²¹ and in the Philippines, another stronghold of the industry, total employment was some 525,000 people in 2010.²²

Contract farming is linked to very large numbers of jobs for smallholder farmers; its employment and poverty reduction implications are generally viewed positively. The overall number of contract farmers is uncertain but individual projects can have several hundred thousand participant farmers at a time. For instance, the PTP Group, a joint venture between Asia Timber Products (Singapore) and the local government in Leshan, China, involves the participation of 400,000 forestry workers in fibreboard production (*WIR09*: 144). Similarly, Nestlé (Switzerland) is working with more than 550,000 farmers around the globe supplying it with commodities for its food and beverage businesses.²³ In Mozambique, some 400,000 contract farmers are participating in GVCs.²⁴ On a smaller scale, but nevertheless significant for the countries and GVC segment involved, the Coca-Cola/SABMiller value chain involved 3,741 workers in Zambia and 4,244 in El Salvador in 2008, mostly in contract farming

Box IV.4. Employment impact in developing countries of NEMs in garment and footwear production

The employment impact of contract manufacturing in low technology-intensive industries such as garments and footwear is significant in developing economies. Most major brand companies such as Nike, Adidas, H&M, Gap, Puma, Collective Brands and Hugo Boss use extensive networks of contract manufacturers based in different developing economies to produce their brand products. For instance, all of Nike's footwear is produced by contract suppliers outside of the United States – some 600 factories in 33 countries, including Argentina, Brazil, Cambodia, China, El Salvador, India, Indonesia, Mexico, Sri Lanka, Thailand, Turkey and Viet Nam – which involves over 800,000 workers. Similarly, Puma has contract manufacturing arrangements with some 350 factories, a majority of which are in developing economies, involving 300,000 workers. Thus, unlike electronics contract manufacturing, which is relatively concentrated in East Asia, contract manufacturing in garments and footwear is far more dispersed, especially in poor countries.

In some developing economies foreign contract manufacturers constitute the bulk of the contract manufacturing activity. The rapid growth of the garment industry in countries such as Bangladesh, Cambodia, China and Viet Nam owes much to the participation of foreign contract manufacturing firms producing locally for international clients, at least initially (UNIDO, 2009; McNamara, 2008). In the case of Cambodia, 95 per cent of exports in the industry are by foreign firms, mostly developing economy TNCs from China, Hong Kong (China), Indonesia, Malaysia, the Republic of Korea, Singapore and Taiwan Province of China. These companies employed around 300,000 people in 2009, accounting for nearly 50 per cent of Cambodia's manufacturing employment.

Source: UNCTAD.

arrangements (SABMiller, Coca-Cola and Oxfam, 2010).

International franchising is also a significant contributor to employment in host countries, where the formula is widely used. The number of franchising businesses, mostly micro- and small enterprises, in developing countries is growing rapidly and franchising in some countries is considered an important tool for unemployment reduction for its potential to create both formal entrepreneurial employment and dependent employment in small business outlets. For example, in Brazil around 780,000 people were employed in franchised businesses in 2010 (just under 1 per cent of the total workforce) (Rocha, Borini and Spers, 2010; UNCTAD-WFC survey), while in South Africa, franchised businesses employed 460,000 people in 2010, almost 2.5 per cent of the total labour force,²⁵ and in Malaysia, franchising businesses employ more than 200,000 people, or some 1.7 per cent of the workforce.

Management contracts in some industries can also have a sizeable employment impact in host countries. The potential of the hotel industry to create jobs is one of the reasons that many developing-country governments are aiming to grow the industry. The global branded hotel market has an estimated employment of 3.5 million people, of which roughly 400,000 jobs are attributable to operations run under management contracts abroad (box IV.3). International hotels often offer a higher service level (requiring more staff per room) than local hotels (Fontanier and van Wijk, 2010). Research in six developing countries has shown that foreign-owned accommodation has a staff-to-guest ratio of 8:1, compared to the 1:1 or 1:2 ratio reported for domestically owned accommodation (UNCTAD, 2007). International hotel groups are currently expanding their reach, particularly in Asia. In China, for instance, the InterContinental Hotel Group has an expansion plan to double its current complement of 150 hotels over the next five years. This expansion plan will be mostly carried out using management contracts, creating an additional 90,000 jobs – on top of the current 40,000 employees in China.²⁶ International hotel chains operating through management contracts or franchising in host countries are a powerful pull

factor in complementary activities employing low-skilled workers, such as laundry, cleaning and security (in addition to higher-skilled areas such as surveillance and IT services) in developing countries (Lamminmaki, 2005; UNCTAD, 2007: 81; MKG Hospitality, 2011).

The employment impact of NEMs is even more significant when *indirect employment* is taken into account, through linkages with local firms, as in the case of IT-BPO in India above, or contract farming in Kenya (box IV.10). In terms of backward linkages, sources of indirect employment include workers employed by subsequent tiers of contractors (for instance in contract manufacturing), providing services or parts and components to NEM partner firms. In addition, employment is created by providers of ancillary services. For instance, in franchising in the retail sector, further employment is created by local service providers to the NEM operations, such as logistics companies, advertising firms, interior design companies, local suppliers of raw materials and local packaging companies. Similarly, licensing of host country firms in the pharmaceutical industry creates employment opportunities in other parts of the local value chain, such as in pharmaceutical R&D or product distribution.

The factors that influence working conditions in non-equity modes are the type of mode and the industry, the sourcing practices of lead firms, and the role of governments in defining, communicating and enforcing labour standards.

NEMs such as franchising, licensing and management contracts are frequently perceived as enhancing employment conditions in host countries, often due to relatively strong management control or oversight from international partners, although franchising businesses are not immune to bad working conditions.²⁷ In an UNCTAD-World Franchise Council survey of franchising associations, which represent the interests of franchisors and franchisees, 64 per cent of franchising associations around the world state that employees in foreign chains enjoy at least the same working conditions as prevailing in local host-country chains; while 30 per cent declare that franchisees and their employees have better working conditions in foreign chains compared to local competitors.

NEMs that are focused on reducing production costs, such as contract manufacturing or services outsourcing, are more often criticised for weak employment conditions, including the violation of national and international labour rights. In order to keep costs down and remain competitive and attractive as partners for lead TNCs, NEM firms can take measures that impinge on workers' rights and freedoms – low wages and benefits, excessive overtime, job instability²⁸ and poor health and safety practices (Milberg and Amengual, 2008). In some extreme cases, heavy criticism in the media and by activists and consumer organizations has forced international firms to intervene and to work with their local NEM partners in order to improve working conditions (box IV.5).

While contract manufacturing, contract farming and similar modes can employ large numbers of workers, the very nature of cost-sensitive production can be problematic because TNCs can shift to other locations with even lower operating costs. This “footloose” nature of some NEMs can have severe consequences for workers, NEM partners and industries in host economies. For instance, in 2000 the garment industry in Lesotho employed over 45,000 workers and accounted for 77 per cent of the country's exports, chiefly produced by contract manufacturers from Taiwan Province of China under the Africa Growth and Opportunity Act

(AGOA), which gave privileged access to the United States market. After 2003, however, as quotas on garment imports to the United States from large, low-cost locations such as China and India were removed, the industry in Lesotho was devastated. Many factories were closed and thousands of jobs lost (McNamara, 2008).

Jobs in labour-intensive NEMs are highly sensitive to the business cycle in GVCs, and can be shed quickly at times of economic downturn. One example is the electronics cluster in Guadalajara which, although an example of successful value chain upgrading, also illustrates the highly volatile nature of certain types of employment created through NEMs. Box IV.6 illustrates, however, that it is possible for NEMs to manage demanding customers, seasonality and other sources of volatility, for example through diversifying the customer base.

Over the last two decades, however, the relationship between core firms and their NEM partners has started to change. Campaigns by civil society, NGOs and media have begun a process assigning social and environmental responsibilities in supply chains back to lead firms. In 2009 for example, one of Nike's NEM partners in Honduras closed two of its factories, leaving 1,800 workers unemployed and without the legally mandated severance payments they were due. With the help

Box IV.5. Labour conditions in Foxconn's Chinese operations – concerns and corporate responses

Foxconn, a subsidiary of Hon Hai Precision Industry Co Ltd (Taiwan Province of China), is the world's largest contract manufacturer in the electronics industry. In common with many other contract manufactures, Foxconn has been involved in several controversies concerning working conditions. Reports on Foxconn's Chinese operations have in the past identified facility-specific issues on wages and benefits, work intensity, occupational health and safety, working hours, management quality, employee breaks, grievance mechanisms, treatment of student workers, and dining and living conditions.

A number of Foxconn's customers, including Apple, Dell and HP, have responded to these concerns by carrying out an independent investigation and subsequently by working with Foxconn senior management on corrective actions towards higher international labour standards. The action plan consists of several steps to improve working conditions in factories, including the introduction of new salary standards that reduce pressure for overtime as a personal necessity for employees, the relocation of some manufacturing operations closer to migrant workers' hometowns (thereby maintaining social structures and support systems), and helping employees to integrate better into the community to promote a positive work-life balance and create a more extensive support network. Despite these positive actions, a recent report by a Hong Kong (China)-based NGO (SACOM) argues that labour rights abuses persist at some of Foxconn's facilities in China.^a

Source: UNCTAD.

^a “Foxconn and Apple fail to fulfill promises: predicaments of workers after the suicides”, SACOM website at <http://sacom.hk>.

of “The Workers’ Rights Consortium” NGO, civil society groups initiated intense public campaigns until Nike agreed to take over the supplier’s full obligations (severance payment, nine months of medical care and job training for laid-off workers). This “public relations liability” has extended the social responsibility of TNCs beyond their actual legal boundaries and compelled them to increase

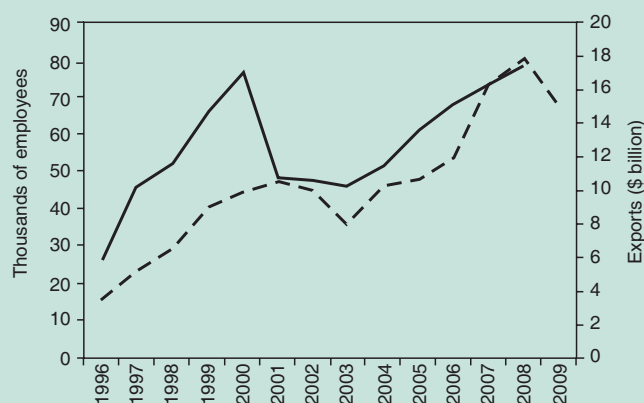
their influence over the activities of their value chain partners.

It is increasingly common for TNCs, in order to manage risks and protect their brand and image, to control their NEM partners through codes of conduct, to promote international labour standards and good management practices. Although most codes are developed individually by companies,

Box IV.6. Cyclical employment in contract manufacturing in Guadalajara

Guadalajara, the capital of Jalisco State in south-west Mexico, is home to an electronics cluster deeply embedded in GVCs. Until 2001, when the technology bubble burst, Guadalajara’s factories competed directly with those in China in the production of high-volume, price-sensitive items such as mobile phone handsets and notebook computers. During 1994–2000, when large contract manufacturers such as Flextronics, Jabil Circuit and Solectron, all established facilities in Guadalajara, the value of electronics exports from Jalisco State increased at an average rate of 35 per cent per year. In contrast, during 2000–2005, the average annual export growth rate was reduced to near zero, with falling exports in two consecutive years (box figure IV.6.1).

Box figure IV.6.1. Volatility in contract manufacturing employment in Guadalajara, 1996–2009



Source: Cadelec, 2010.

With the downturn in the business cycle, the decline in output and employment after 2001 was precipitous. Total hi-tech employment peaked in Jalisco State at more than 76,000 in 2000, and after 2001 dropped by 40 per cent to less than 46,000; in some plants, employment fell by up to 60 per cent. Some contract manufacturers with facilities both in Guadalajara and in other locations shifted high-volume work to lower-cost plants in China. High variations in employment, as in the case of electronics in Guadalajara, are a general feature of the Mexican maquiladora industries. Employment volatility in such Mexican plants was found to be twice that of United States facilities in the same industry. The close economic ties between the two countries, resulting in a “synchronization” of business cycles, had some observers speaking of the United States exporting a portion of its employment fluctuations over the business cycle to Mexico (Bergin, Feenstra and Hanson, 2008; Blecker and Esquivel, 2010).

However, to increase the utilization of facilities in Guadalajara, contract manufacturers found new partners in retail outlets in the United States, and started to produce lower-volume goods, often on a direct-ship, rapid replenishment basis. Examples of such electronics products include low- and mid-range computer servers, electronic fish finders for use in recreational boating and alarm systems for homes and businesses. Very few of the products made in Guadalajara in 2000 are still made there today. Contract manufacturers and workers have had to adapt to more complex production and supply processes. New logistics functions have been added to ship small lots directly to retailers for distribution, and materials management, testing, and quality assurance processes have been upgraded to accommodate the increased product variety. Over time, the industrial upgrading that took place has led to a gradual recovery to previous levels of employment and exports.

Source: Sturgeon and Dussel-Peters, 2006; Cadelec, 2010.

they are commonly based on international principles such as ILO labour standards, the UN Universal Declaration of Human Rights, or the OECD Guidelines on Multinational Enterprises (chapter III). In combination with individual company codes, many TNCs also adopt third party standards, such as SA8000 (for labour practices) or ISO14001 (for environmental management). Currently there are over 2,600 facilities certified to SA8000 across 65 industries,²⁹ and more than 200,000 ISO 14001 certificates have been issued in more than 150 countries.³⁰ These certifiable third-party standards assure TNCs that their suppliers meet certain basic standards, and help developing country enterprises to differentiate themselves when seeking international business partners (Riisgard and Hammer, 2010).

NEM firms in most industries need to commit to the terms set forth in a code before entering into business relationships with lead firms. Thus, for many NEM partners the adherence to internationally recognized labour standards is part of their contractual obligations. In this way, core firms themselves are emerging as a regulator of sorts, issuing process guidelines covering a range of social and environmental practices. To ensure that the code of conduct is implemented and followed by their partners, core firms engage in compliance monitoring, which often includes management audits and on-site factory inspections. For instance, H&M has an inspectorate in South Asia which investigates the working conditions in the approximately 40 clothing factories in India and Sri Lanka with which the company works. In 2010 they carried out 251 visits, about half of which were unannounced.³¹

Although questions remain about TNCs' motives vis-à-vis CSR in global value chains (Starmanns, 2010), it can be observed that lead firms that have worked with codes over a longer period of time have introduced a systematic approach to supplier monitoring and rating. Accordingly, they integrate the outcomes of the inspections into their purchasing decisions, rewarding those NEM partners that comply with the standards, or at least show strong commitment to meeting them. However, it has also become evident over the past decade, that many companies are reluctant to

drop a supplier for failure to meet the conditions of the code. Instead, NEM partners typically have to implement corrective action plans to rectify critical issues identified during the audits. To support their NEM partners in their efforts to meet compliance with the code, lead firms offer special supplier development programmes for social and environmental issues. In this way, codes are being used as a basis for capacity-building programmes aimed at transferring specific management know-how to developing country enterprises.

2. Local value added

The direct impact of NEMs on local value added can be significant; however, the scale of additional indirect value creation depends greatly on the nature of the particular

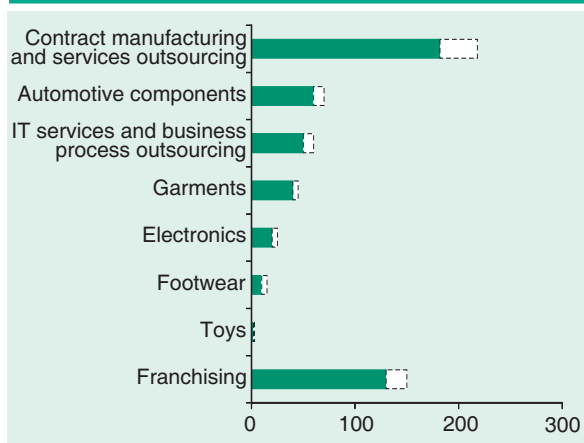
NEMs can generate significant value added in the host economy – including through second-tier linkages – even when their share of value created in the global value chain is limited.

NEM, the structure of the TNC's GVC and the underlying capabilities of other local firms. UNCTAD estimates that the direct value added impact of cross-border NEMs is roughly \$400–500 billion dollars a year (table IV.4). Of this amount, contract manufacturing and services outsourcing are the largest single contributor, accounting for more than \$200 billion (figure IV.9).

Among those industries with significant contract manufacturing activity, automotive OEM components and garments generate the largest share of value added. Electronics contract manufacturing, footwear, and toys are manifestly smaller, due in part to industry size – footwear and toys are smaller markets – and the nature of the manufacturing being contracted – much of the activity covered in electronics is related to final assembly of goods. Cross-border franchising, which includes a spectrum of discrete activities, accounts for roughly \$150 billion of value added worldwide.

The real significance of NEM-related value added stems from its importance within a particular country's economic context. While global NEM value added accounts for less than 1 per cent of global GDP, in some developing countries it

Figure IV.9. Estimated global value added in contract manufacturing, services outsourcing and franchising, selected industries, 2010
(Billions of dollars)



Source: UNCTAD estimates.

Note: See box IV.2 for the methodology used. The dotted area depicts the range estimate for each item.

represents a significant share of economic activity. For example, in the Philippines, IT-BPO activities accounted for 4.8 per cent of GDP and generated \$9 billion export revenues in 2010.³² India's auto components industry, working mostly under contracting arrangements, contributes about 2.3 per cent to the country's GDP and is expected to generate \$30 billion in revenues in fiscal year 2010–11.³³

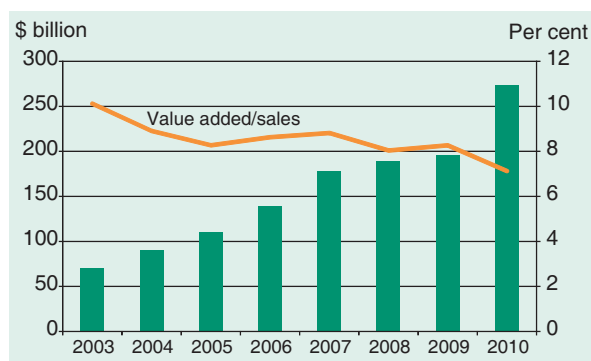
This value added activity, however, is often only a small part of the value generated within the GVC of any particular product. For efficiency-seeking NEMs, such as contract manufacturing, services outsourcing and contract farming, value capture in the host economy can be small, depending crucially on the nature of a NEM's integration into lead TNCs' GVC and the balance of power between the two. If the NEM partner's role is confined to processing inputs from one step in a TNCs' value chain to be passed onto the next, the scope for local sourcing, and thus for additional indirect value generation, is relatively limited as goods are imported, processed, and subsequently exported. On the other hand, greater autonomy has the potential to generate substantial indirect local value added, as NEM partners can make greater use of local suppliers, retaining value in the host economy.

Electronics contract manufacturing provides a clear example of the interplay of these forces. The explosive growth of this mode in the industry has stemmed largely from lead firms wanting to outsource the lowest value added activities of their internal processes. Combined with their significant bargaining power over their NEM partners, lead firms' logic in using contract manufacturing often squeezes local capture of value added. This has led to a steady fall in the generation of value added by their NEM partners, who face ever-smaller margins (figure IV.10).

For instance, in the case of the iPhone that Foxconn (Taiwan Province of China) assembles on behalf of Apple (United States), only a small share of the unit value added is captured by the company's Chinese factories. Much of the remaining global value added is accounted for by Japanese, Korean and other international suppliers pre-selected by Apple, as part of the firm's globally integrated value chain, as well as by Apple and its vendors (box IV.7). Importantly, the low value captured by the NEM partner in this example reflects the *industry* (and the balance of power within it), rather than the country location of production. For example, in a similar case – the Nokia N95 Smartphone – the value added in manufacturing was determined to be 2.1 per cent of the total, whether the phone is produced in Finland or China, though production methods and factor inputs might differ (Ali-Yrkkö et al., 2011).

Local NEM partners are not, however, necessarily locked into a low local value added trap. Many electronics contract manufacturers are quickly evolving to provide additional services to their clients in higher value-generating activities in other segments of the value chain. In some cases, former contract manufacturers have created their own brands and are now competing with lead TNCs in the global consumer electronics market (Sturgeon and Kawakami, 2010). One argument in favour of developing countries undertaking low value added NEM activities is that the apparently unfavourable balance in value capture for local NEM firms is the initial price they pay for access to TNCs' knowledge assets and long-term capability development (Moran, 2011).

Figure IV.10. Total sales and value added as per cent of sales for top electronics contract manufacturers, 2003–2010
(Billions of dollars and per cent)



Source: UNCTAD.

Note: Value added is calculated as the sum of pre-tax income, personnel costs (wages), and amortization/depreciation. Value added as per cent of sales based on data from six of the top 10 major companies in this segment (Hon Hai, Compal Electronics, Inventec, Quanta Computer, Wistron Corp, and TPV Technology).

Beyond contract manufacturing, value added in predominantly market-seeking NEMs such as franchising, management contracts and licensing essentially remains in the host economy – apart from the fees and royalties involved. In the hotel industry, for instance, operations linked to a TNC were found to source no less locally than host country competitors (UNCTAD, 2007).

The extent and nature of backward linkages by NEMs and their concomitant additional local value capture vary by mode, industry and host country, depending on the capabilities of local firms. The use of local inputs, and the overall impact on host country value added, increase if the emergence of contract manufacturing leads to a concentration of production and export activities in clusters (e.g. industrial parks). The greater the number of plants and the more numerous the linkages with TNC buyers, the greater are the spillover effects and local value added, as seen in the Republic of Korea in the 1980s and 1990s, Malaysia in the 1990s and 2000s. In addition, cluster policies can reduce the risk of TNCs shifting production to other locations because of the benefits they gain from cooperation with firms in such agglomerations.

The extent of local sourcing is also governed by contractual agreements between NEM partners. For example, adherence to specified quality standards is a common feature in licensing, contract manufacturing and franchising agreements, which can limit sourcing in host economies if local suppliers do not meet the required quality levels. Nevertheless, franchise operations can create significant local linkages. McDonald's (United States), for example, often builds up a domestic food value chain to supply its stores. Once a supplier and McDonald's have agreed on standards and quality guarantees along the food chain, contracts and local value creation tend to be long-term.³⁴

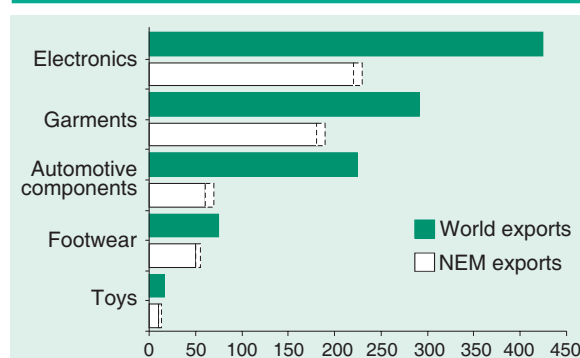
3. Export generation

NEMs shape global patterns of trade in many industries. In toys, footwear, garments and electronics, contract manufacturing and services outsourcing represent more than 50 per cent of global trade (figure IV.11).

NEMs generate export gains – the extent of which is context and mode-specific.

Modes such as contract manufacturing, business-process outsourcing and contract farming, by their nature create substantial exports and foreign exchange earnings. As industries associated with these modes often show significant clustering effects, this can lead to high shares of individual industries in a country's or region's exports: for

Figure IV.11. World and NEM-related exports, selected industries, 2010
(Billions of dollars)



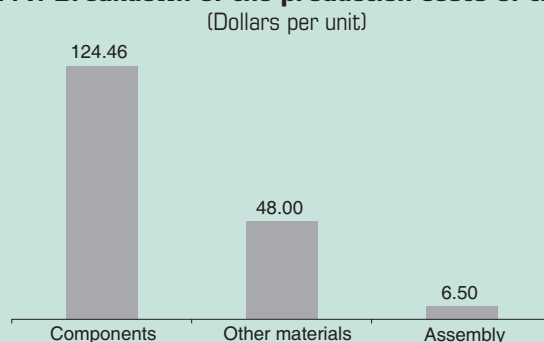
Source: UNCTAD estimates.

Note: See box IV.2 for methodology used. The dotted area depicts the range estimate for each item.

Box IV.7. Value capture can be limited: iPhone production in China

The relative value added captured by contract manufacturers in developing countries, compared to the total value created in the overall global value chain and expressed in currency units of the final destination market (or as a percentage of the final product sales price), can appear very limited. This is illustrated by the well-known case of the Apple iPhone, for which it is estimated that only \$6.50 of the \$179 production cost (retail price, \$500 in the US market) is captured by Foxconn (Taiwan Province of China), the company's NEM partner in China (box figure IV.7.1). The share captured by domestic Chinese companies is even less, limited to packaging and local services. This is, in part, because iPhone are assembled from components made mostly in other countries, such as the United States, Japan, Germany and the Republic of Korea.

Box figure IV.7.1. Breakdown of the production costs of the iPhone, 2010



Source: UNCTAD, based on Xing and Detert, 2010.

Note: The remaining \$321 of the \$500 retail price is accounted for by Apple and other companies' returns to R&D, design, distribution and retailing etc.

instance, toys made up \$12.9 billion, i.e. more than half, of Guangdong province's (China) exports in 2010.³⁵ In Bangladesh and Cambodia the garment industry accounted for some 70–80 per cent of total national exports in 2008–2009.³⁶ In India, textiles and apparel exports were \$22 billion, i.e. 12.5 per cent of total exports, in fiscal year 2009, and were expected to grow fast.³⁷ Looking beyond individual industries, goods for processing trade, the shipping of intermediate goods for assembly or further processing (and thus a good proxy in international statistics for trends in contract manufacturing), has exploded during the past decade. In China, the gross value of such exported goods reached \$655 billion in 2009, up from roughly \$138 billion in 2000 (IMF, BoP database).³⁸

IT-BPO and contract farming also underline the significant export generation of efficiency-seeking NEMs. During 2005–2009 average IT-BPO exports from India, amounting to two-thirds of the country's total IT-BPO industry revenues, were equivalent to 14 per cent of India's total exports. Similarly, exports of cut flowers (produced under contract)

from Ethiopia, Kenya and Zimbabwe accounted for more than 8, 9 and 14 per cent of the respective countries' total merchandise exports in 2009.³⁹

In NEMs that are primarily oriented towards the host country market – such as franchising, licensing and management contracts – export gains are clearly more limited, but not absent. In the global hotel industry, with almost all international operations run either as a franchise or under a management contract, global chains give hotel-owners access to new customer groups, in particular international tourists and business travellers. In the upper segments of the hotel market in particular, the high proportion of international guests is an important feature.⁴⁰

In licensing, constraints on exporting activity can be built into contractual agreement between the TNC and host country licensees, especially in terms of geographical delimitation of the sales activities of the NEM partner. For example, the South African pharmaceutical company Aspen Pharmacare is limited in its exports of patented anti-retroviral (ARV) drugs under the terms of its licensing agreements

with GlaxoSmithKline and Boehringer Ingelheim (Berger, 2006; Amuasi, 2009: 14).

Net export generation may differ appreciably by mode and industry. Franchising in retail goods, for instance, normally creates few exports, but imports can rise in the case of branded goods retailing. In the case of management contracts in hotels, the influx of international tourists constitutes a rise in services exports and normally the associated imports are low. Similarly, modes such as contract manufacturing and contract farming lead to net export gains, although these can be limited where the import of intermediate goods or services accounts for a significant part of the value, as in the case of the iPhone (box IV.7). The impact on export generation is higher in the case of other contracting modes, such as services outsourcing.

As an alternative route to international market access, international franchising can be an avenue for brands from developing countries to grow internationally (including as master franchisees for lead TNCs) with little need for high up-front investments. In the case of Brazil, for example, 68 home-grown brands – about 5 per cent of the total national franchised networks – have internationalized and expanded to some 50 countries around the world through franchising as a mode of entry (Rocha, Borini and Spers, 2010). Similarly, franchised businesses based in South Africa have opened outlets in neighbouring countries across Southern Africa (figure IV.12)

4. Technology and skills acquisition by NEMs

NEMs can diffuse technology and skills to local partners. The extent of technology uptake depends on local absorptive capacities.

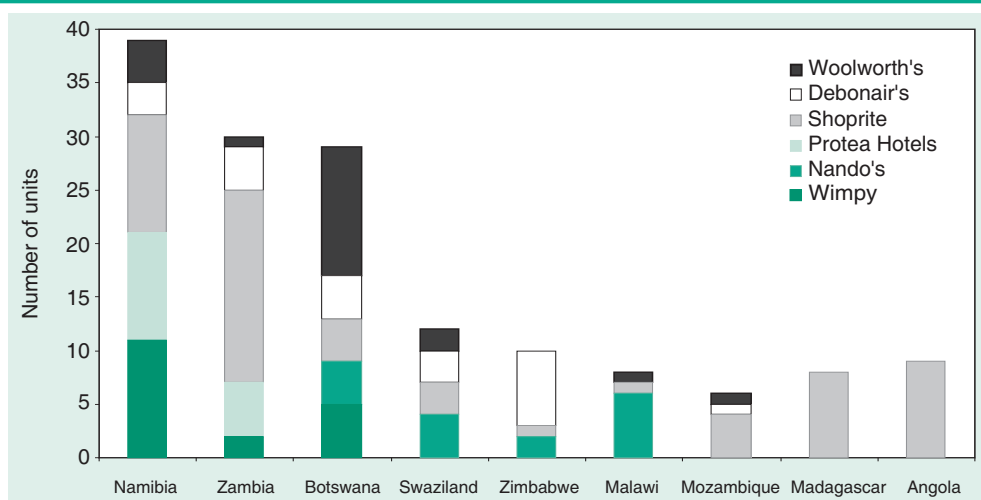
Technology encompasses a range of hard and soft elements, often in combination, e.g. intellectual property (including patents, blueprints, manuals etc.); machinery and other capital equipment; production and organisational knowledge and skills (including quality standards and norms); managerial, engineering and other skills (including tacit ones); business models; and even – potentially – corporate culture and values. The extent and combination of technology and skills received by NEM partners differs.

Licensing involves a TNC granting an NEM partner access to intellectual property – usually with some contractual conditions – and with or without training or skills transfer. A good example is MAN B&W Diesel (MBD), a Danish subsidiary of MAN AG (Germany), which has been licensing marine engine technology primarily – with some training – to shipbuilders in Asia (Japan, the Republic of Korea and China account for 92 per cent of production). Such narrow technology transfers, with limited interaction between the TNC and partners, imply that in licensing, the NEM company normally must already possess significant capabilities and absorptive capacities, in order to assimilate and utilize the knowledge received. Since the 1960s, companies in Asia and Latin America, especially in Argentina, Brazil and the Republic of Korea, have been active in pursuing such strategies (acquiring and absorbing narrow, specific technologies), primarily because of their existing industrial base, in sectors such as automobiles, electronics, pharmaceuticals and shipbuilding⁴¹ (Kim, 2003; Mudambi, Schrunder and Mongar, 2004; Pyndt and Pedersen, 2006; UNCTAD, WHO and ICTSD, forthcoming).

In contrast, in the case of international franchising, which transfers a business model, extensive training and support are normally offered to local partners in order to properly set up the new franchise, with wide-ranging implications for technology dissemination. In addition to professional skills – which are industry-specific – the training and support given usually includes general managerial competencies, e.g. financial, marketing and management knowledge to let entrepreneurs manage the new business efficiently (i.e. elements in creating absorptive capacity). For example, the 7-Eleven franchise system provides not only structural support (store equipment), but also field consultants who regularly meet with franchisees in order to help them maximize store performance and profitability. Also, prior to the establishment of a 7-Eleven store, the TNC provides training to facilitate the start-up of the new business and provides ongoing in-store and computer-based assistance to help the franchisee in developing their business.⁴²

Some TNC hotel groups, apart from providing internal training programmes, contribute to initiatives

Figure IV.12. Regional spread of selected South African franchise chains, 2010



Source: UNCTAD, adapted from Beck, Deelder and Miller (2010).

to build capacity in the sector. One example is the current expansion of the InterContinental Group in China. The company has launched the IHG Academy, a public partnership that provides hospitality job training in local communities. The Academy has 23 partners located in 10 cities, training 5,000 students per year. Other examples include Best Western's establishment of a Centre for Hotel Management and Training in India and the creation of the Hospitality Training Campus in UAE, to address the needs of the international hospitality and tourism industry (Intercontinental Hotel Group, 2010).

TNCs exist primarily because they possess intellectual property, or other forms of knowledge; it is therefore normally in their interest to create or seek barriers to make acquisition of this knowledge by other firms more difficult. Nevertheless, for host countries, NEMs can be an important interface for acquisition and diffusion of knowledge from lead TNCs – in a similar fashion to JVs and affiliate-supplier linkages. This is because NEMs are a part of TNCs' global value chains; it is in TNCs' interest to disseminate technology – including building local absorptive capacities – to their partners, at least to a degree (UNCTAD, 2010c).⁴³ A good example of how a TNC may do this is provided by IKEA's relationship with its developing country suppliers

in the home furnishing industry. IKEA has a policy of working long-term with its suppliers, but without "lock-in" (i.e. NEM partners can continue to supply to other customers). The relationship with suppliers is managed by dedicated regional trade sales offices (TSOs) which ensure that necessary technology and skills are provided, either through the TSO, staff despatched from the parent office or external expertise (consultants, international manufacturers) (Ivarsson and Alvstam, 2010a; 2010b).

Technology acquisition and assimilation by NEM firms, whether in processes, products or along the value chain, are therefore not infrequent and are consistent with the role that these firms play in value chains (UNCTAD, 2010c; Morrison, Pietrobelli and Rabelotti, 2008). Most relevant research on this issue has been conducted on contract manufacturing and services outsourcing. In some East and South-East Asian economies in particular, but also in Eastern Europe, Latin America and South Asia, technology and skills acquisition and assimilation by NEM companies in electronics, garments, pharmaceuticals and IT-BPO services – among others – has led to their evolution into TNCs and technology leaders in their own right (WIRO6; section B).⁴⁴

A good example of a company which has become a significant TNC and technology leader by being

(and continuing as) an NEM is Hon Hai (Taiwan Province of China) – holding company to Foxconn – which was the 13th largest recipient of patents⁴⁵ granted in the United States in 2010.⁴⁶ With 1,438 patents (up from about 500 in 2000), Hon Hai is one of only four developing country companies in the top 50 assignees of United States patents in 2010;⁴⁷ and the number is not far off the 1,490 received by LG Electronics (Republic of Korea). Hon Hai is following in the footsteps of other Taiwanese companies such as Acer and AsusTek, in moving from a pure contract manufacturer to becoming a brand. All these companies made this transition on the basis of deep expertise established over time in product definition and design.⁴⁸

Although technology acquisition and assimilation through NEMs is a widespread phenomenon, it is not a foregone conclusion, especially at the level of second- and third-tier suppliers, where linkages may be insufficient or of low quality, or the absorptive capacity of suppliers low. The Taiwan Province of China notebook computer production network in China, for instance has not yet resulted in significant upgrading by small local suppliers (Yang, 2010).

Overall, a number of factors affect technology and knowledge acquisition and assimilation by NEMs. Among the most important of these are (1) the industry, (2) local absorptive capacities, and (3) NEM strategies. With respect to *the industry*, key determinants are the industry's structure, GVC and learning opportunities. For example, in "low-tech" industries such as garments, footwear and furniture, most opportunities for technological/skill upgrading are inherent in product design (controlled by brands) and production methods (capital goods and inputs, generally purchasable from manufacturers independent of the brands). As most technology is embodied in capital goods, this means that there are few barriers to technology upgrading, apart from the cost of the equipment.⁴⁹

On the other hand, in industries such as automotives and components, technology assimilation requires mastery of complex products, processes or systems. This makes technology and assimilation more difficult for new players on the scene, and explains the dominance of developed country TNCs in such industries.

How NEMs fare despite these constraints depends greatly on *absorptive capacity* (Giuliani, Pietrobelli and Rabellotti, 2005). For example, although the Philippines is successful in various services outsourcing GVCs, the recent financial and economic crisis that created a competitive impulse for upgrading such industries also showed that local NEMs may lack the necessary capabilities to do so, including services requiring "creative" work, such as animation (Tschang and Goldstein, 2010). In the Philippine animation industry, the local NEMs' combination of high wages, limited skills sets and fragile markets led TNCs such as Warner Brothers to move their contracts to other countries such as India and China. Even in the case of IKEA, mentioned earlier, only a small proportion of its suppliers improve their innovative capabilities (albeit all suppliers achieve better operational capacity and about half are able to absorb adaptive technologies) (Ivarsson and Alvstam, 2010a). To benefit fully from technology and skills available through particular NEM arrangements, it is therefore important for local firms to develop their absorptive capacities.

Strategies of NEM partners also matter. For example, it is possible for companies to engage in "deep niche" specialization, whereby they become technologically advanced in particular components on a mass scale and realize profits through cost reductions. For instance, Bharat Forge (India) is now the world's second largest producer of forgings for car engines and chassis components. Its customers include most major automobile companies and it has affiliates in China, Germany, Sweden and the United Kingdom.

Finally, NEM partners can adopt strategies in their dealings with TNCs to improve their bargaining power and technology acquisition and upgrading. A very common strategy which pays dividends is customer diversification leading to cross-chain learning (i.e. NEM companies benefit from knowledge gained from a number of TNCs). For example Acer and AsusTek (both Taiwan Province of China) achieved their success in notebooks through leveraging knowledge gained from supply chains of many TNC customers. They were able to innovate on the basis of the wider technological base thus gained, through an entrepreneurial pioneering of new niches. For instance this led to AsusTek –

followed by Acer and others – subverting Intel's product roadmap by expanding its target market for netbooks to include customers in the developed world (Intel's vision had only encompassed sales of the devices to developing countries, hence their lower cost) (Sturgeon and Kawakami, 2010; Shih et al., 2008).

IKEA actually encourages such cross-chain learning, despite the risks, because it improves their supplier capabilities (Ivarsson and Alvstam, 2010c). Another example, from a low-tech industry, is that of the Brazilian furniture and footwear industries. Research shows that companies which have serviced multiple value chains in NEM relationships in this industry (rather than operating as affiliates under a single TNC network), including creating brands for domestic and regional customers, are able to use the learning in design, marketing and branding to interact more effectively as they gradually gain the capacities to sell direct to final customers. Operating in multiple value chains appears to improve NEMs' options for upgrading (Navas-Aleman, 2011).

5. Social and environmental impacts

NEMs can serve as a means to transfer international best social and environmental practices, but they may also allow TNCs to circumvent such practices.

Many socio-cultural and political issues arise from TNC involvement in developing countries, including a range of externalities such as changing consumption

patterns and cultural values. In the case of NEM operations, to the extent that the TNC is not directly involved, some of these issues are weaker in scope, but they remain in essence.

For instance, franchising can influence local socio-cultural norms by contributing to the growth of consumerism, increasing the use of imported inputs, and the development and strengthening of commercial values and standards (Freund and Martin, 2008; Grünhagen, Witte and Pryor, 2010). In this context, although there are many economic benefits arising from modern retail franchise networks,⁵⁰ there is often a tension between the elements of “modernization” – some brought about through NEM activities – and the essence

of traditional identity.⁵¹ The entry of “fast food” restaurants offering accessible non-traditional fare has met with some resistance in countries such as China, India and Mexico (Alon, 2004).

At the same time, some governments have become adept at using NEMs to address and overcome important social issues in their countries. Franchising, for example, is an effective system of localizing the operations of a foreign company, by integrating its business model into a population of entrepreneurs who will then have ownership interests in the business and who can cater to national development goals. With this in mind, the Government of South Africa has officially promoted franchising, for instance when issuing a mobile phone licence to Vodacom in the 1990s with specific requirements that involved providing services to the poor, who either had limited or no access to phone lines. Vodacom subsequently set up a system of franchised “Telecom Kiosks”, often consisting of renovated shipping containers with some installed phones linked to the mobile network.⁵²

The use of micro-franchising as a distribution channel to the poor or low-income segments of a market is common in developing countries, with telecom services a widespread example, e.g. in Ghana, India, Indonesia, Senegal or Thailand; while in some countries like Bangladesh and Peru a similar franchising model is used to broaden internet access (Falch and Anyimadu, 2003; ITU, 2010: 22–23). In Malaysia, Bank Rakyat together with Perbadanan Nasional Bhd (PNS), an agency under the Ministry of Entrepreneur and Cooperative Development, has allocated \$4 million to a loan scheme to back the Women Franchise Programme and the Graduate Franchise Programme. Other examples include the sale of household products to the poor, e.g. for Unilever in India through its Project Shakti.⁵³ In a similar vein, the Government of Liberia uses TNCs and their supply chains to support job creation for young people, including in the agriculture and forestry sectors (Arai, Cissé and Sock, 2010).

TNCs and NEMs can also take social-cultural initiatives, while at the same time addressing their needs. It is possible for NEMs, such as hotel chains entering markets through franchising and contract

management, to diversify their local capability programmes to support wider goals than their immediate skill needs (though the two can be interrelated). An example of such an approach in Thailand involves major international chains (InterContinental Hotels Group (United Kingdom), Marriott International (United States), Fairmont Hotels and Resorts (Canada), Four Seasons Hotels & Resorts (Canada), Hyatt Hotel Corporation (United States), Hilton Worldwide (United States), Starwood Hotels and Resorts Worldwide (United States), NH Hotels (Spain)) in establishing and sustaining “the international tourism partnership youth career service”.⁵⁴ This has developed into a strong, private–public cooperation, focusing on poverty alleviation and youth employability.

NEMs, like all industry, inevitably have environmental impacts – mostly similar in type to FDI. Contract farming can have serious impacts, among others through soil erosion and biodiversity loss (*WIR09*: 155–157). The specific environmental impacts of contract farming activities depend on contingent factors, including the specific crop or activity undertaken, production technologies, the scale of operations, and host-country and international rules and regulations on the environment. An important factor is the technical support or encouragement provided to the NEM by the TNC, which can be controversial, e.g. in terms of inputs and production methods to support the farming of genetically modified crops (box IV.8).

There is a significant body of evidence to suggest that TNCs are likely to use more environmentally friendly practices than domestic companies in equivalent activities. Applying a uniform environmental standard across all global operations is normally less costly than taking advantage of laxer environmental regulations in some locations. The extent to which TNCs guide NEM operations to the same effect depends, first, on their perception of and exposure to legal liability risks (e.g. reparations in the case of environmental damages) and business risks (e.g. damage to their brand and lower sales). Second, it depends on the extent to which they can control NEMs.

TNCs employ a number of mechanisms to influence NEM partners, including codes of conduct, factory

inspections/audits, and third party certification schemes. Ultimately the level of influence a TNC has over its NEM partners is determined by a range of factors including how fragmented or concentrated the industry is at the level of the NEM partner, which determines how much choice the TNC has in selecting the partner.

In the cases of franchising and management contracts, NEMs for which the TNC’s brand is a key driver, environmental reporting is of high importance. For example, seven of the 10 largest hotel groups worldwide (all extensively involved in franchising and/or management contracts) provide extensive information on their global policies to promote environmental responsibility, including reductions in waste, water use and electricity consumption, as well as their carbon footprint in their annual and CSR reports. In this respect, training of personnel and recycling facilities are two of the most commonly adopted measures to tackle environmental challenges and encourage an ecological conscience. Some, such as InterContinental Hotels Group PLC and Marriot International are pioneering the construction of sustainable hotels and buildings using renewable resources, thereby contributing to the diffusion of more environmentally friendly practices.

6. Long-term industrial capacity-building

NEM activity in developing host countries can make immediate contributions to employment, to GDP, to exports, to linkages and to the local technology base. In doing so, NEMs also help to provide the resources, skills and access to global value chains that are prerequisites for long-term industrial capacity building. The long-term industrial development impact of NEMs filters through each of the impact types discussed in previous sections:

- o The *employment* generated by NEM activities contributes to the build-up of a formalized workforce, with the potential to obtain skills

NEMs can enhance productive capacities in developing countries through their integration into global value chains, but there are also concerns related to long-term dependency, limited value added and “footlooseness”.

Box IV.8. Managing the environmental impact of contract farming

In the cut flower industry, operations by TNCs and their contract farming schemes have often been criticized for negative environmental impacts due to their high water consumption leading to water depletion, and due to the fact that many producers are far from their customers, thus creating significant impact from transport activities. In response, farms working with TNCs have introduced environmentally sustainable practices, such as geothermal steam and integrated pest management systems (Wee and Arnold, 2009). For similar reasons, since the late 1990s, the banana industry in Latin America (where contract farming is also common) has progressively seen the adoption of environment-friendly farming techniques in plantations. Organic planting technologies introduced through foreign firms' networks have boosted value creation and led to higher incomes for farmers (Liu, 2009).

Despite these recent efforts for sustainable farming, TNCs have been consistently criticized for their environmental impact through contract farming. One positive result of these criticisms seems to be the fact that TNCs are increasingly embracing environmental certification for produce in their GVCs, to protect their corporate image and to manage risks. (In some cases, environmentally friendly methods also contribute to reducing cost, through lower inputs and recycling.) Regular environmental and social inspections are performed to guarantee that contract farmers conform to good agricultural practices (GAPs), sustainable environmental standards and good working conditions for their employees. Compliance is implemented through codes of practice and certification by industry associations.

Source: UNCTAD, based on WIR09: 155–157.

- that can be transferred to the wider economy, as workers change jobs. Skills include technical, managerial and professional skills, as well as values and experience of business culture. The extent to which the labour force is flexible and can afford to look for new opportunities (i.e. is not forced for subsistence reasons to stay in occupations where working conditions limit possibilities to seek improvement) is an important aspect of the potential of NEMs to contribute to longer-term development.
- o The *local value added* generated by NEMs may be limited in the early stages of development of an economy, where NEM activities may be confined to low value added and low-tech segments of global value chains. In the longer term there are opportunities through NEMs to grow a country's presence in such limited value chain segments to a "dominant" international position to maximize development potential, to extend its presence to adjacent segments of the value chain, or to enter other value chains that may depend on similar skills, resources and endowments.
 - o NEMs are a major "route-to-market" for countries aiming at export-led growth, and a major point of access to TNC global value chains. While initially NEMs in countries in the early stages of development may be the only point of access, local firms can grow into independent exporters and gain independent access to global value chains, often by gradually moving to serve more than one TNC network.
 - o Long-term industrial capacity building implies the gradual upgrading of local technological capabilities and the pursuit of a degree of technological independence. The path to such independence is, for example, often from third-party factories in the early stages of development, to contract manufacturing activities for multiple TNC value chains at a later stage, to design and own brand development (including for domestic or regional markets) (box IV.9).
 - o Even the impact of NEMs on social and environmental standards can have a bearing on long-term sustainable industrial development, insofar as industrial upgrading, moving up to higher value added segments of global value chains, is conditioned increasingly by extended corporate social responsibility demands placed on all actors in the chain by lead TNCs.
- A major part of the contribution of NEMs to the build-up of local productive capacity and long-term prospects for industrial development is through impact on enterprise development as, in contrast to

Box IV.9. From contract manufacturing to building brands – the Chinese white goods sector

Chinese manufacturers are key players in the white-goods household appliance sector globally; over 50 per cent of Chinese production is destined for overseas markets.

Few Chinese players are operating internationally with their own brands. Nevertheless, several contract manufacturers, active in international supply in mass product categories such as refrigerators, washing machines, microwaves, air-conditioners or domestic cooling fans, have progressively moved into design and secondary innovation. For example, Hisense develops multiple product variants each year that exhibit innovative design. Many of these manufacturers entered the market barely a decade ago, but have migrated from pure outsourced third-party factories to independent contract manufacturers.

Internationally, the high levels of exports still largely compete on the basis of cost advantages in contract manufacturing arrangements, based on large consignment orders, for both manufacturers and large retail chains. For a particular product category, these operations are often heavily clustered in a particular town or city; microwave-oven production for example is dominated by the manufacturers Galanz and Midea, who between them represent some two-thirds of global production volumes, and are both based in Shunde. Their supplier base is located within a two-hour road transport network, facilitating rapid response and low cost.

Price competition is fierce both in the domestic market and in consignment-based international contract production, where manufacturers have routinely accepted single-digit profit margins. A number of producing firms are now aiming to establish independent footholds in overseas markets to improve these margins. Manufacturers, including Hisense, Midea and Haier, are now producing designs that are increasingly producer-branded. This will also help them in the domestic market, as domestic consumers are becoming increasingly brand aware.

Source: UNCTAD, based on case studies by the Institute for Manufacturing, University of Cambridge.

FDI, local entrepreneurs and domestic investment are intrinsic to NEMs. Such domestic investment, and access to local or international financing, is often facilitated for NEMs, either through explicit measures by TNCs providing support to local NEM partners such as supplier capacity-building initiatives or financing guarantees, or through the implicit assurance stemming from the partnership with a major TNC itself or from the contract setting out terms and conditions obtained by the local partner. There can also be indirect impacts on capital formation.⁵⁵

For example, in the case of franchising, access to a proven business model facilitates access to commercial credit for start-up capital requirements for local micro- and small entrepreneurs. The reduced risk associated with a “tried and tested” business model, and in some cases explicit guarantees offered by TNC franchisors, ease negotiations with banks. Contract farming also tends to increase local investment in agriculture by giving farmers a guaranteed fixed income against which they can borrow money from local financial institutions (*WIR09*). In the case of other NEM types, such as contract manufacturing, UNCTAD

has included such practices into its roster of good practices in business linkages (*WIR04*).



The potential contributions of NEMs as catalysts for long-term development are clear and typified by economies such as India, Kenya and Taiwan Province of China (box IV.10). However, concerns are often raised (especially with regard to contract manufacturing and licensing) that countries relying to a significant extent on NEMs for industrial development risk remaining locked into low value added segments of TNC-governed global value chains and cannot reduce their technology dependency. In such cases, developing economies would run a further risk of becoming extremely vulnerable to TNCs shifting productive activity to other locations, as NEMs are more “footloose” than equivalent FDI operations.

The related risks of “dependency” and “footlooseness” must be addressed through policies touching on each of the impact areas discussed above, but above all they must be addressed by embedding NEMs in the overall development strategies of countries.

Box IV.10. NEMs as catalysts for capacity-building and development***Contract manufacturing in Taiwan Province of China***

Taiwan Province of China has successfully transformed into an industrial power through contract manufacturing, especially in electronics. This strategy was pursued after the Second World War because the economy possessed an educated labour force, a developed infrastructure and a large number of entrepreneurial SMEs in manufacturing and other industries. The Government built on this by providing a strong policy influence and institutional support aimed at fostering local capabilities, including establishing links with foreign TNCs. In the case of electronics, the State-owned Electronics Research and Services Organization, National Chiao Tung University and National Development Fund have played a significant role in the development of the industry. Local firms and the economy have upgraded their capacities over time, moving from the production of goods using simple technologies, through more capital and technology intensive processes, to – increasingly – innovation. Over a period, this strategy has produced many local world-class electronics companies such as Acer, BenQ, Asus, Quanta, Foxconn, many of which are now TNCs. The process has also led to a formidable industrial cluster, on which the economy continues to build, e.g. through a move to semiconductors. Both Taiwan Semiconductor Manufacturing Company (TSMC) and United Microelectronics Corporation (UMC), two leading global semiconductor producers, owe much to the Government for their existence.

Services outsourcing in India

India is today a world-leading destination for IT-BPO and offshoring activities. The industry accounted for about 6.4 per cent of the country's GDP, about 26 per cent of export revenues, and over two million jobs in 2011. The success of the industry in India owes much to the existence of significant IT companies, such as Tata Consultancy Services, most with existing links with TNCs in the United Kingdom and North America, when IT-BPO services offshoring began to accelerate in the 1990s. Indian NEMs were able to take advantage of a large low-cost labour force with English language and technology skills, as well as the strong policy and institutional support from the Government and the industry's organization. Indian firms' existing scale and links with local industrial groups meant that they had the absorptive capabilities to acquire, assimilate and develop technology and skills from their relationship with TNC partners. Many of them have become TNCs themselves. The rapid growth of the services outsourcing industry has improved India's competitiveness and the overall investment environment. The IT-BPO industry has evolved over the past two decades and is a significant support or infrastructure industry for the Indian economy. It provides skilled, IT-savvy employees and entrepreneurs who are now playing a significant role in other industries (e.g. telecommunications) – all of which has fostered economic diversification.

Contract farming in Kenya

Contract farming has helped Kenya emerge as a major agriculture exporter and helped to modernize the processes utilized by its local farmers. This is exemplified by the country's floriculture industry, which produces cut flowers for foreign auction centres and retailers. A combination of active government support, favourable agro-climatic condition, availability of low-cost farm workers and the role of foreign-owned farms have contributed to Kenya's floriculture development. Through out-grower arrangements, small cut flower farms in Kenya produce and sell their flowers to larger local Kenyan or foreign companies, which control, grade, bunch and export the flowers to auction centres in the Netherlands. Local and foreign-owned farms also produce cut flowers under contract for customers, including major supermarkets, in other developed countries. Kenya's cut flowers industry has grown rapidly at 18.6 per cent CAGR between 2000 and 2009, and employs a significant number of people with some 2 million or about 7 per cent of the population relying on the industry for their livelihood; the industry contributes to poverty alleviation and rural employment and development. Technology acquisition, quality control and improved infrastructure play a role in modernizing Kenya's farming sector and furthering the competitiveness of the agriculture industry. In addition, the introduction of a business culture with a stress on quality and reliability develops capacities among workers and entrepreneurs beyond agriculture, and is a force for diversification of the economy.

Source: UNCTAD.

E. POLICIES RELATED TO NON-EQUITY MODES OF INTERNATIONAL PRODUCTION

Maximizing the development benefits of NEMs requires embedding them into overall development strategies, building domestic NEM-related productive capacity, NEM-specific promotion, and policies to mitigate negative effects.

Appropriate policies are necessary if countries are to maximize the development benefits from the integration of domestic firms into NEM networks of TNCs. There are four key challenges for policymakers. First, how to integrate NEM policies into the overall

context of national development strategy; second, how to support the building of domestic productive capacity to ensure the availability of attractive business partners that can qualify as actors in global value chains; third, how to promote and facilitate NEMs; and fourth, how to address negative consequences related to NEMs (table IV.15).

1. Embedding NEM policies in development strategies

Many countries are increasingly opting for more proactive industrial development policies, in particular since the recent global economic crisis. These policies interact increasingly with the national and international policy frameworks for FDI (see chapter III) and trade. Given the importance of

NEMs in global value chains and in developing country economies, there is a case for industrial development policies to embrace NEMs as an additional means to achieving development objectives.

Analogous to the common policy challenge in industrial policy of “picking winners”, successful government strategies towards using NEMs to galvanize capacity-building reflect the economy’s natural and created endowments, its industrial structure and the capabilities of local enterprises. These strategies should build on concrete opportunities to integrate local players into specific activities or segments of global value chains, such as existing linkages with international production networks and existing export markets. Because of the evolutionary nature of GVCs, initial success in one “GVC niche” can breed additional outsourcing and induce rapid growth (Whittaker et al., 2010).

NEM policies within industrial development strategies that aim at industrial upgrading support firms in moving up to higher stages in the value

Embedding NEM policies in overall development strategies requires their integration into industrial development strategies, ensuring coherence with trade, investment and technology policies, and mitigating dependency risks.

Table IV.15. Maximizing development benefits from NEMs

Policy areas	Key actions
Embedding NEM policies in overall development strategies	<ul style="list-style-type: none"> • Integrating NEM policies into industrial development strategies • Ensuring coherence with trade, investment, and technology policies • Mitigating dependency risks and supporting upgrading efforts
Building domestic productive capacity	<ul style="list-style-type: none"> • Developing entrepreneurship • Improving education • Providing access to finance • Enhancing technological capacities
Facilitating and promoting NEMs	<ul style="list-style-type: none"> • Setting up an enabling legal framework • Promoting NEMs through IPAs • Securing home-country support measures • Making international policies conducive to NEMs
Addressing negative effects	<ul style="list-style-type: none"> • Strengthening the bargaining power of domestic firms • Safeguarding competition • Protecting labour rights and the environment

Source: UNCTAD.

chain, reducing their technology dependency, developing their own brands, or becoming NEM originators in their own right. Policies can support businesses to extend their operations into adjacent activities and segments of the value chain to maximize value added and job creation (see below).

Most importantly, embedding NEMs into comprehensive industrial development strategies can help address the risks arising from dependency on a limited range of technologies, market segments or TNC partners.

In the short term, the implications of “footlooseness” can be mitigated by improving the “stickiness” of NEMs, with a view to retaining existing TNC engagements with domestic NEM partners. Policymakers can maintain – and possibly even increase – domestic NEM partners’ attractiveness by building sufficient local mass and clusters of secondary suppliers, by nurturing existing NEM relationships or by improving the overall NEM climate (e.g. improving soft and hard infrastructure).

As part of the longer-term strategy, countries can reduce dependency risks by balancing specialization and diversification. Policies that foster specialization can improve NEM partners’ competitive edge within a value chain, allowing them ultimately to move towards segments with greater value capture, or even to become “NEM originators” themselves. This is of particular importance in situations where countries’ development paths, and related structural changes, result in a reduction of their low labour cost competitiveness. Diversification, in turn, can help mitigate dependency risks by ensuring that domestic companies are engaged in many different activities, both within and across different value chains, and connected to a broad range of NEM partners.

These strategies can be complemented by labour and social policies aimed at cushioning adjustment costs and smoothing adjustment processes. Bridging support, while local industry builds capacity in other activities to fill gaps or finds

alternative international NEM partners, can help address social and other challenges arising.

On a more permanent basis, periodic review by host countries of their international competitiveness as NEM destinations, involving close monitoring of key indicators concerning labour and other cost factors, is critical. Competitiveness based only on cheap labour can easily vanish as the economy develops. Continuous learning and skills upgrading of domestic entrepreneurs and employees are necessary preconditions for domestic firms to qualify as attractive business partners for higher value added activities, when foreign companies move relatively “low-end” economic activities and production processes to cheaper locations. People-embodied technology ultimately is the most effective anchor for TNCs.

2. Domestic productive capacity-building

NEM-related development strategies can only be successful if enterprises in developing countries qualify as potential NEM partners of TNCs. Several policies related to productive capacity-building are important in this context:

Effective policies to attract and benefit from NEMs require the promotion of local business partners with good entrepreneurial and technological capabilities, and sufficient access to finance.

- *Entrepreneurship policy*, to develop local entrepreneurs capable of partnering international NEMs and taking advantage of them.
- *Education policy*, to improve the entrepreneurial, technological and managerial skills of the local labour force, including vocational training, so as to be able to engage in NEMs.
- *Technology policy* to support local technological uptake and upgrading so as to enable local firms to capture more value added in NEM relationships.
- Policies geared towards *easing access to finance*.

a. Entrepreneurship policy

Proactive entrepreneurship policies consist of measures to raise awareness of entrepreneurship as a career option and to support individuals who are willing to assume the risks of engaging in business activities. Awareness is also necessary to promote an entrepreneurial culture among a country's population. Building on this, support for start-ups and commercialization is fundamental at the early level of business development, including in the NEM context. Business "incubators" are a useful government tool to assist producers that engage, for instance, in contract manufacturing. Most incubators are linked to or sponsored by government institutions, universities or industry associations. Governments can also support the creation of business networks and linkages to assist new entrepreneurs in their interaction with established companies and facilitate access to resources and clients. Finally, supportive administrative regulations can help entrepreneurs to turn new ideas into business products and firms, including through simplification of administrative steps and the provision of specific information through government websites and portals.

b. Education

Education plays a fundamental role in developing entrepreneurial attitudes, technological and managerial skills and behaviours relevant for NEMs. Key in this respect is to embed entrepreneurship knowledge (including financial literacy and business strategy for start-ups) into the formal educational system at all levels, including schools, universities and private sector bodies. This can be supported by reaching out to the business community and integrating it into the learning process, e.g.

by offering practical training and internships in companies.

Vocational training and the development of specialized skills can be a key policy to enhance the capacity of local companies to engage in NEMs (box IV.11). It prepares trainees for jobs involving manual or practical activities, which are non-academic and related to a specific trade or occupation. An example is education programmes for local farmers to increase their productivity and to enhance sustainable methods of agricultural production (WIR09). Depending on the educational systems of countries, vocational training can be set up at the secondary or post-secondary level, and can also interact with apprenticeship systems. To promote the development of specialized skills, entrepreneurship centres can be established that serve as hubs to coordinate activities across business and educational institutions. These centres can also focus on the coordination of after-school programmes or activities in community centres.

c. Enhancing technological capacities

National technology policies play a vital role in the development of local capacities for technology-related NEMs. This requires a combination of policies geared towards developing technology clusters, encouraging acquisition and dissemination of technology and skills through improved local absorptive capacity, and protecting intellectual property rights. In a broader sense, it also encompasses policies to disseminate information on international business standards expected from local NEM partners of TNCs, such as quality standards, automation processes and prevailing ITC systems.

Box IV.11. Educational reforms in Viet Nam promote entrepreneurship

In Viet Nam, the Government has supported higher education vocational training schools through its Ministry of Education and Training (MOET). Recently, MOET has supported various initiatives to improve the knowledge base of the population. A new education law was passed in 2005 and a plan was formulated by MOET to implement a National Policy Framework for development of a profession-oriented education system, to convert most existing universities into professional higher education institutions. The system will make it possible to connect the curricula with the ever-changing educational and training needs of the industrial sector, the service sector and respective labour markets.

Source: UNCTAD, based on Pham Truong Hoang, "Industrial Human Resource Development in Vietnam in the New Stage of Industrialization" Vietnam Development Forum, available at: www.vdf.org.vn.

Generating and disseminating technologies are both vital activities for the development of local capacities in technology-related NEMs. Disseminating technology can foster technological upgrading and hence facilitate the involvement of domestic producers in global value chains. The promotion of partnerships between SMEs and organizations overseas, for the dissemination of key technology, products, processes or management practices, can be useful. The provision of technologies, for instance in the form of new seeds and pesticides, can support local farmers in contract farming (*WIR09*). Policies aimed at generating technology can strengthen the technological base and attractiveness of domestic NEM partners. For example, technology clusters that promote R&D in a particular industry can help generate technology by bringing together technology firms, suppliers and research institutes.

Recent years have witnessed some successful initiatives by governments to stimulate not only the involvement of national producers in global value chains, but also to foster their upgrading through technological innovation. For instance, through a combination of targeted incentives and the establishment of centers of excellence, both Egypt⁵⁶ and the Philippines⁵⁷ have promoted technological upgrading among local contractors with a focus on improving the competitiveness of call centers and business processing operations. Both countries built their strategies on existing capacities and comparative advantages and policies supported the creation of linkages with the wider business community. In the long run these kind of initiatives may also allow the domestic NEM contractor to become an NEM originator in its own right. Technology-related policies are also crucial to avoid local firms being limited to low value-added activities within NEM relationships; upgrading helps host countries to capture higher economic rents within the value chain. Specific policies include supporting training and capacity-building via skill development and business development service programmes, establishing logistic technology centres as demonstration and testing facilities,

facilitating technological upgrading and promoting partnerships.

Appropriate protection and enforcement of IP rights is a precondition for IP holders to disclose their technology to licensees in developing countries, especially in areas involving R&D-intensive, but at the same time easily imitable technologies, such as pharmaceuticals (UNCTAD, 2010b). Hence, IP protection plays an important role in the NEM context. It can also be a means of encouraging R&D by local NEM partner firms. A new UNCTAD study of developing country cases in the automotive components, software and audiovisual industries emphasizes the relevance and mutual dependence of technological upgrading and the protection of intellectual property rights (UNCTAD, 2010b). SMEs are more likely to invest resources in R&D and technological upgrading if their innovations are protected against piracy.

d. Access to finance

Access to finance is a key concern for SME entrepreneurs in general, and it can be a particular constraint when engaging in NEMs. Government policies aimed at promoting credit for SMEs can take the form of tax breaks, subsidies and government loan guarantees,⁵⁸ or of alternatives to traditional bank credit, e.g. the formation of venture capital funds to assist start-ups.

Policies can be instituted to address the circumstances of SMEs involved in NEMs with foreign companies. For example, in order to reduce the commercial risks faced by contract manufacturers, governments can create a legal framework for “factoring”, where a firm can sell its accounts receivable (i.e. invoices) to a third party in exchange for money with which to finance current expenditure.⁵⁹ Also, governments can promote finance for licensing and franchising through official institutions that provide special windows for this type of activity, or encourage their formation within existing private institutions (box IV.12). The establishment of agricultural development banks can particularly focus on serving the financial needs of local farmers and small holders (*WIR09*).

Box IV.12. Providing access to finance for SMEs engaging in franchising activities

In the Philippines, the Philippine Franchise Association (PFA), Small Business Guarantee and Finance Corporation (SBGFC), the Development Bank of the Philippines (DBP) and the Export Industry Bank (EIB) launched franchise financing facility windows specifically for franchisors and franchisees. Additionally, SBGFC provides credit through the banking system to finance the requirements of small and medium enterprises, including franchises, in various productive sectors such as manufacturing, agribusiness and service.

Source: UNCTAD, based on information from the Philippine Franchise Association and Small Business Guarantee and Finance Corporation.

3. Facilitation and promotion of NEMs

Facilitating and promoting NEMs requires an enabling legal framework, strengthened promotion policies, securing home-country support and harnessing international policies.

a. Setting up an enabling legal framework

NEMs are based on contractual relationships. The laws and regulations governing these contracts are therefore an important NEM determinant, and can constitute either an incentive or an obstacle for this kind of business cooperation.⁶⁰ According to investment promotion agencies (IPAs) from developing countries and economies in transition, weak contract laws and cumbersome administrative rules on business start-ups are perceived as the main regulatory obstacles by TNCs. This is particularly the case for contract manufacturing and management contracts.

NEMs would be facilitated by a clear and stable regulatory framework. NEM parties need to know what domestic rules govern their contract, the extent to which these regulations constrain their contractual discretion, whether and to what extent they have the right to choose the law of a third (neutral) country to apply to the contract, the consequences of a breach of contract, what procedures apply in the event of a dispute, in particular whether they can opt for international arbitration instead of domestic court proceedings, and how a judicial decision or arbitration award can be enforced.

Identifying the applicable laws and regulations is

complicated by the fact that most countries do not have specific rules for individual NEM types, such as contract manufacturing, contract farming or franchising, but apply general contract laws, together with other legislation that may be relevant in the specific context. Many law areas may come into play, such as regulations on intellectual property (e.g. for licensing or franchising), competition, consumer protection, employment and environmental protection. Under these circumstances, ensuring transparency and coherence of the legal framework becomes particularly important.

An additional task to improve the legal framework for NEMs is to promote the simplification of administrative steps needed to set up new businesses. For example, “one-stop shop” initiatives that concentrate registration procedures in a single agency can reduce the time needed to set up a company, and also reduce costs. Communication campaigns that provide information on existing regulations through media and websites can also contribute to business facilitation.

b. The role of investment promotion agencies

UNCTAD's latest survey of IPAs indicates that at present they are only modestly involved in attracting NEMs, with most of their attention to date devoted to contract manufacturing (table IV.16). This is the case for almost all regions; only agencies in Asia seem to give more attention to franchising.

A review of existing NEM-specific promotion activities, implemented either by IPAs or by other government institutions, reveals variations between different NEM modes: (i) fiscal and financial subsidies

Table IV.16. Share of IPAs actively involved in the promotion of NEMs, 2011
(Percentage of respondents)

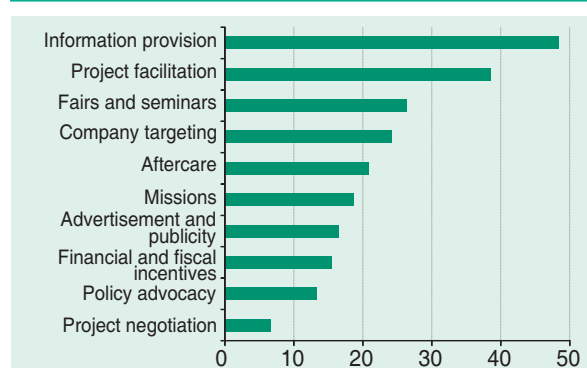
Mode	Current promotion	Expected importance in the future	Main industries
Strategic Alliances, Contractual joint ventures	54	60	Across the board
Contract manufacturing	40	49	Textiles and apparel, electrical and electronic equipment and business services
Franchising	26	43	Hotels and restaurants and retail and wholesale trade
Management contracts	24	36	Hotels and restaurants
Contract farming	20	32	Agriculture, hunting, forestry and fishing
Licensing	19	31	Pharmaceuticals

Source: UNCTAD, forthcoming c.

are mainly used for contract manufacturing; (ii) promoting local entrepreneurship is, in particular, linked to franchising; (iii) technological upgrading is mostly mentioned in connection with contract manufacturing; while (iv) matchmaking plays an important role across the board.

Beyond assisting domestic NEM partners, IPAs can play an important role in promoting the use of NEMs to TNCs. Figure IV.13 indicates that, in general, IPAs involve themselves mainly with information provision and project facilitation in this respect. For instance, investment fairs play an important role in the promotion of franchising opportunities. Involvement in project negotiations mainly occurs in the case of management contracts. Investor targeting, investment missions and the provision of incentives are more common in the case of contract manufacturing.

Figure IV.13. Use of IPA policy tools for NEMs, 2011
(Percentage of respondents)



Source: UNCTAD, forthcoming c.

c. Home-country policies

There are examples of TNC home countries promoting specific forms of NEM, in particular franchising. For example, the Australian Trade Commission (AUSTRADE) provides a number of services to Australian franchisors abroad, including coordinating missions around international events, undertaking market research, business partner searches and individual market visit programmes.⁶¹ The United States Exim Bank offers long-term financing in emerging markets to United States franchisors involved in international franchising (Richter, 2009). In Malaysia, export promotion activities for the franchise industry by the Malaysia External Trade Development Corporation (MATRADE) include participation in international fairs and organizing special marketing missions in conjunction with franchise exhibitions.⁶²

National export insurance schemes as well as political risk insurance for FDI can be extended to NEMs. For example, the United States Exim Bank can provide insurance for franchising related to export activities.⁶³ Official development aid can be used to fund supplier development programmes in host countries (*WIR01*) and can include technical assistance aimed at domestic capacity-building for NEM.

d. International policies

While there is no comprehensive international legal and policy framework for fostering NEMs and their development implications, a number of different international treaties and policies merit attention.

The role of IIAs in protecting – and hence promoting – NEMs and NEM-related investments is not straightforward. IIAs are not designed to cover NEM arrangements, which do not involve an (equity) investment and hence miss the element that typically triggers IIA application.⁶⁴ Moreover, the type of protection offered by IIAs (i.e. protection against government interference or conduct) might not correspond to what is mostly required by NEM partners. However, certain NEM components can be considered part of an investment package, under the broad or asset-based definition of “investment” in IIAs (e.g. a trade mark or patents), particularly when TNCs have both FDI and NEMs in the same host country. In such cases, IIAs could have some application.

However, there are other international treaties that may impact – directly or indirectly – on NEMs, including for example, the WTO General Agreement on Trade in Services (GATS) (e.g. by reducing barriers to trade in services, and hence to a certain extent facilitating business process outsourcing or cross-border franchising in, for example, hotel, restaurant, or distribution services). NEMs relying on intellectual property may benefit from IP rules at national, regional and multilateral levels. Also relevant are other non-binding guidelines and recommendations in specific areas such as licensing, technology transfer and innovation.

Regional integration agreements can foster NEMs by encouraging harmonization and institution-building and helping establish regionally integrated production networks and value chains. Of relevance also is the World Bank’s Multilateral Investment Guarantee Agency (MIGA), which, from November 2010, may provide political risk insurance also for activities other than FDI, including management contracts, services, franchising and licensing agreements.⁶⁵

Some international “soft law” instruments can promote NEMs by harmonizing the rules governing the contractual relationship between private NEM parties, or by guiding private NEM parties in the crafting of the NEM contract. For example, (i) the Model International Franchising Contract, issued by the International Chamber of Commerce (ICC) provides franchisors and franchisees with drafting

suggestions; and (ii) the 1998 UNIDROIT Guide to International Master Franchising Arrangements (in its 2007 revision) comprehensively examines and explains master franchise arrangements.

Some of these international initiatives also aim at addressing potential negative effects of NEMs. For example, in terms of strengthening the bargaining power of domestic NEM partners, the 2002 Model Franchise Disclosure Law developed by the International Institute for the Unification of Private Law (UNIDROIT) addresses pre-contractual disclosure on the part of the franchisor, and the ICC Model Contract explicitly aims at striking a balance between the interests of the franchisor and franchisee. As regards potential anti-competitive effects, international competition policies remain patchy.⁶⁶ International environmental law, international labour standards, and soft law initiatives, including CSR, all play a part in ensuring that NEMs deliver tangible development benefits without detrimental side-effects.

4. Addressing potential negative effects of NEMs

Addressing negative effects of NEMs requires strengthening the bargaining power of local firms, safeguarding competition, and protecting labour rights and the environment.

a. Strengthening the bargaining power of domestic firms

Negotiating a NEM contract with a foreign TNC can be a challenge for firms in developing countries, where local entrepreneurs will often be in a weaker position, have little or no experience or knowledge of NEMs, and sometimes do not fully understand the implications of concluding a deal. The local firm’s negotiation position might further be weakened by the fact that TNCs often use standard contract forms with local foreign partners, leaving little room for individual bargaining. Strengthening the negotiating power of domestic firms can be an important means to achieving a fair sharing of risk between the contracting parties, and to preventing the contract from confining the local company to low value-added activities.

Box IV.13. Pre-contractual requirements in franchising

The most common obligation on the franchisor is to provide pre-contractual disclosure of all relevant information, allowing the prospective franchisee to enter the contract with full knowledge of the facts. How much information needs to be disclosed, and how long in advance, depends on the country. Some countries have set a detailed list with required information (e.g. China, France, Japan, Mexico, United States) while for others this is based on general principles (e.g. United Kingdom) or is derived from case law (e.g. Germany). The most common requirements include information on the franchisor's business experience, past or pending litigation, financial statements, franchise fees and the existing network of franchisees. Other information may include operational details, including the franchisor's involvement in supervision or training of the franchisee. How long in advance these documents need to be disclosed varies, e.g. from seven days in Singapore to 14 in Australia, Canada or the United States, or 30 days in China or Mexico.

Franchising regulation may also include other obligations for the franchisor. For instance, the United States requires the franchise offering to be registered with the state. In China, the franchisor must fulfil the "2+1" requirement, that is the franchisor must have owned at least two stores that carry out the franchised business for more than one year, although these do not necessarily need to be in China. In France, the franchisor needs to have run a similar business in a manner and for a time necessary to be considered a success. In other countries similar requirements are not part of the legal framework itself, but are set out in a franchise code of ethics (e.g. in Germany and the United Kingdom).

Source: UNCTAD, based on Getting the Deal Through – Franchise 2011, available at www.franchise.org.

One means of backing domestic firms in their negotiations is through the imposition by the host country of mandatory requirements on NEM counterparts. The respective issue is then no longer a bargaining chip between the negotiators. Such mandatory rules exist particularly for franchising and contract farming. For instance, numerous countries have franchising regulations, establishing certain pre-contractual requirements for the franchisor vis-à-vis the franchisee (box IV.13).

Specific laws on contract farming have been adopted in a few countries, including India, Thailand, and Viet Nam. The provisions address, inter alia, the establishment of a special register or a notification procedure for contract farming agreements, special regulations on leasing of land by enterprises and land property rights of farmers, compensation in case of contract breach, and rules relating to force majeure. Another key aspect relates to special dispute settlement mechanisms, e.g. facilitating access to justice for farmers and ensuring that decisions are final, binding and enforceable (WIR09). With such provisions in place, NEMs may be more appropriate than FDI in sensitive situations, since contract farming is more likely to address responsible investment issues – respect for local rights, livelihoods of farmers and

sustainable use of resources – than large-scale land acquisition.

Local entrepreneurs can also benefit greatly from advice on how to negotiate a NEM contract. This includes economic aspects (distribution of business risks), financial considerations (e.g. taxation) and legal elements (implications of the contract). In most cases it is not the lack of an adequate legal framework, but the lack of carefully drafted contracts, that lies at the root of subsequent problems and failures. Governments can play a role, for instance, by developing and publishing negotiating guidelines, checklists of issues to be considered in negotiations, codes of conduct, model contracts (including for contract farming) or benchmark prices for the respective product or service. Promoting a "contract culture", i.e. a better understanding of the merits of entering into formal contracts, is also vital. Finally, supporting collective bargaining, including the formation of domestic producer associations, can help to create a better counterweight to TNCs' negotiating power.

b. Addressing competition concerns

NEMs, like FDI, can have serious implications for competition in the host countries. Specific

contractual provisions in NEMs, such as exclusive dealing obligations, territorial constraints, and resale price maintenance, frequently raise competition concerns. They are considered as per se anti-competitive in many competition law regimes. If TNCs engaged in NEMs acquire dominant positions, they may be able to abuse their market power to the detriment of their competitors (domestic and foreign) and their own trading partners. Therefore, policies to promote NEMs need to go hand in hand with policies safeguard competition (WIR97).

Competition-related considerations may go beyond the enforcement of the “rules of the game” to ensure that enterprises do not undertake restrictive business practices. Other public interest criteria may require attention as well. Protection of indigenous capacities and traditional activities that may be crowded out by a rapid increase in market shares of successful NEMs, may be relevant, particularly in market-seeking forms of NEMs, such as franchising.

c. Labour issues and environmental protection

Concerns about labour malpractices and environmental damage related to NEM require government and industry efforts to ensure that internationally recognized labour rights are respected, and environmental protection is in place.

One crucial policy issue is to ensure respect for labour standards as embodied in ILO conventions. This not only requires translating these standards into domestic law, but also effective control by the host-country authorities that domestic NEM firms respect these standards.

Another critical issue is the protection of domestic stakeholders in case of a termination of the NEM relationship by the TNC. Ensuring “responsible divestment” is not only an issue of contractual relationships and relevant host-country regulatory and legal frameworks (including social adjustment policies) but also a social responsibility dimension on the part of the TNCs involved.

The causing of environmental harm by NEM operations raises the issue of legal liability. While the domestic NEM firm bears direct responsibility as

owner and operator of the plant, there is the issue of whether liability could be extended to the TNC, in case that the latter controls or strongly influences many of the processes within the NEM.

These labour and environmental issues are also addressed in TNCs’ voluntary CSR standards. Governments can play an important role in creating a coherent policy and institutional framework to address the challenges and opportunities presented by the universe of CSR standards. As explained in chapter III, various approaches are already underway that increasingly mix regulatory and voluntary instruments to promote responsible business practices.

There is also a role for policies to build the capacity of local NEM firms to meet the labour and environmental standards expected by TNCs. As TNC CSR codes and other CSR standards proliferate to include international value chains, domestic NEM partners are increasingly expected to meet international standards of labour practice and environmental protection. The potential for legal liability and brand damage discourages TNCs from engaging in NEMs with partners having poor labour or environmental records. Many TNCs will conduct audits and factory inspections of NEM partners, and will disengage from business with partners that consistently fail to meet the TNC’s code of conduct. Developing country governments can consider partnering with donor states, international organizations, civil society specialists and industry associations to deliver practical management training and technical assistance to domestic firms in these areas.



Maximizing the development contribution of NEMs requires an integrated policy approach, combining a wide range of different policy tools and instruments, with particular attention given to overall industrial policy objectives, investment, trade and technology policies.

What kind of policies fit best is situation- and context-specific, depending among others on, (i) a country’s level of economic and technological development, (ii) its actual and latent NEM-potential, and (iii) its broader development and industrial policy

strategies.

All of this is taking place in a dynamic context, where the rise and fall of competitive NEM-related industries around the globe requires a continuing reassessment and adjustment of a particular country's overall development strategy and policy instruments.

Enhanced coordination between different policymakers and institutions, as well as building on first-hand private sector experience, with a view to fostering synergies, is crucial in this context.

Notes

- 1 Strictly speaking, alternative forms of TNC overseas operations are not new; some forms, such as licensing and management contracts, were commonly used in past eras (Jones, 2010; Wilkins and Schröter, 1998).
- 2 The OLI model explains why some firms choose to expand overseas and others do not (ownership advantages), why firms choose specific locations (location advantages), and why they choose to "make" rather than "buy" (internalization advantages).
- 3 NEMs can be both domestic and international/cross-border in scope. In *WIR11* all reference to NEMs will be to cross-border arrangements.
- 4 For example, in management contracts and concessions the TNCs are technically the NEMs because they offer technology and expertise to local partners, including governments in the case of infrastructure and extractive industries. However, this leads to *control* over a host country business entity without ownership.
- 5 These linkages between affiliates and local NEMs may also include second- and third-tier suppliers that are in some way dependent on or controlled by the TNC principal.
- 6 For instance, in contract manufacturing, the report focuses on the final stage of production. In electronics this is associated with the final assembly of a consumer electronic good, typified by large electronics manufacturing services firms like Hon Hai (Taiwan Province of China) and Flextronics (Singapore). Seen from this perspective, NEM firms dominate world trade associated with final consumer electronics goods. However, within the context of the entire electronics supply there are many other players.
- 7 Assigning a sales-equivalent value to some of these forms is conceptually difficult (e.g. concessions are generally measured as investment values). There is also a paucity of reliable data.
- 8 Much of this labour was trained by affiliates, especially in South-East Asia, thereby creating assets which were later taken up by contract manufacturers.
- 9 Such strategies remain very much a part of the dynamics of the industry.
- 10 See the company website at: www.lifungroup.com/eng/businesses/sourcing.php (accessed 9 June 2011). The company's business is largely in garments and footwear.
- 11 Based on information from Nasscom, XMG Global, IDC and Gartner.
- 12 Estimates of the global share of these countries in the industry range as high as 78 per cent. See XMG Global report cited in "World's outsourcing revenue worth \$373 billion", by Eileen Yu, ZDNet Asia, 23 September 2009; available at: www.zdnetasia.com.
- 13 There remain doubts about how persistent higher returns might be. For example, in the case of franchising, Alon, Drtina and Gilbert (2007) found no sustainable profit advantage for franchise networks over non-franchise networks.
- 14 Pfizer decreased its own plants by almost 50 per cent (to 46 plants) from 2003 to 2008. Key considerations for outsourcing decisions include the ability to supply, capacity flexibility, cost competitiveness, and technology, while ensuring supply chain integrity/reliability, product quality, and regulatory compliance. Information from Pfizer website www.pfizer.com.
- 15 See "Why Wal-Mart's First India Store Isn't a Wal-Mart", *Time*, 15 May 2009; available at: www.time.com and "Walmart: India Fact Sheet", February 2011; available at: <http://walmartstores.com>.
- 16 See Franchise Malaysia, "Government to the fore", available at www.ifranchisemalaysia.com.
- 17 This included an English skill enhancement programme for which funding was granted to support language training of individuals; and other initiatives such as tax incentives and concessions. See "Philippines call center industry enjoy the strong Government support", available at: www.piton-global/resource16.html.
- 18 For instance, it has taken initiatives to improve human resources quality and has encouraged innovations to strengthen the development of the industry. Expenses on staff training and on development, including research and development can be deducted against income tax at 200 per cent and 160 per cent to 200 per cent, respectively. A 50 per cent excise tax deduction is provided for purchase of equipment for research and development. Companies established in technological parks will be exempted from property taxes and will receive discounts on service taxes. See Brasscom, "Brazil IT-BPO Book: 2008–2009", (brazilexportati.files.wordpress.com) and Brasscom "Government Support", (www.brasscom.org).

- ¹⁹ See “Foxconn to hire more workers in China”, BBC News, 19 August 2010; available at: www.bbc.co.uk.
- ²⁰ See NASSCOM, India (2010), “Impact of the IT-BPO industry in India: a decade in review”, available at: www.nasscom.in.
- ²¹ See “Chilean global services industry”, IDC Study for CORFO, 2009, available at: www.investchile.com.
- ²² See “IT-BPO Road Map 2011-2016” (www.bpap.org) and “IT-BPO road map 2011-2016: driving to global leadership”.
- ²³ Information provided by Nestlé.
- ²⁴ See “Contract farming offers fresh hope for Africa’s declining agriculture”, East Africa Policy Brief, No. 2, 2007 (www.worldagroforestry.org).
- ²⁵ *The Franchise Factor. Franchise directions, franchising consulting and trainings*, by Bendeta Gordon (2008). Available at: www.franchise.co.za.
- ²⁶ “IHG invests in China’s future hospitality talent with three new IHG academies”, 31 May 2011; IHG website at: www.ihgplc.com; and “IHG in Greater China - IHG Greater China Facts Sheet”, IHG website.
- ²⁷ Fast food chains including McDonald’s, Taco Bell and Burger King have been criticized for underpayment to contracted tomato suppliers (contract farmers). In 2005 Florida tomato suppliers won their first wage rise since the 1970s after Taco Bell’s decision to end a consumer boycott by paying an extra cent per pound of tomatoes. Actions continue towards ensuring better conditions for contracted tomato suppliers (Schlosser, Eric (2007) “Penny foolish”, *New York Times*, 29 November).
- ²⁸ For instance, in order to gain greater flexibility in responding to the sourcing requirements of TNCs’ contract manufacturers, services outsourcing firms and contract farmers increasingly hire short-term workers or outsource human resources to “temp agencies” (Barrientos, 2007; van Liemt, 2007).
- ²⁹ Data as of 31 March 2011 www.saasaccreditation.org/certifacilitieslist.htm.
- ³⁰ ISO (2010) *ISO Survey for 2009*.
- ³¹ Interview with Linda Johansson, head of inspections for H&M India; <http://somo.nl>. The company applied a methodology for obtaining bona fide responses from workers.
- ³² See “Philippine IT-BPO road map 2016: driving to global leadership”, Everest Global and Outsource2Philippines; available at: www.ncc.gov.ph.
- ³³ See “Auto parts cost strike JVs for technology, consolidation looms”, *The Economic Times*, 23 May 2011, available at: <http://articles.economictimes.indiatimes.com>.
- ³⁴ Carl J. Kosnar, “Global economic development through the utilization of the franchising system”, www.kosnar.com.
- ³⁵ Total exports from Guangdong province amounted to \$22.2 billion, while total Chinese exports amounted to \$1,577.9 billion (Ministry of commerce PRC). Toy exports from Guangdong province held a share of 58 per cent of total Chinese toy exports (Chinese Toy Association).
- ³⁶ See “Bangladesh ranks fourth in global apparel exports”, *The Daily Star*, 25 July 2010.
- ³⁷ This is expected to grow to \$37 billion by 2011. Increasingly, companies such as Marks and Spencer, Haggard Clothing, Little Label, Boules Trading Company, Castle, Quest Apparel, Wal-Mart, JC Penny, Nautica, Docker and Target are sourcing textiles and apparels from India. See “Textiles and apparel”, IBEF, November 2010; www.ibef.org.
- ³⁸ A share of goods for processing trade is due to intra-firm trade between affiliates or between parents and affiliates of the same TNC.
- ³⁹ Calculated from UN Comtrade data.
- ⁴⁰ “Segments”, IHG website at: www.ihgplc.com. This access is created by international chains’ brand reputation, international quality standards, centralized marketing and customer loyalty programmes, and in particular their global booking systems. In addition, they are able to negotiate directly with tour operators, large travel agencies and large companies and other organizations, thus generating preferred access to otherwise unreachable customer segments.
- ⁴¹ In fact, partly because licensees can possess significant absorptive capacity, there are risks for TNCs. In the case of MBD its largest customer, Hyundai Heavy Industries, with 26 per cent of MBD’s licensing deals, is now competing with it for market shares based on its own proprietary diesel engine (Pyndt and Pedersen, 2006).
- ⁴² 7-Eleven, Inc. – Web Corporate Communication 2011. Available at: www.franchise.7-eleven.com.
- ⁴³ For example, cooperatives and other associations in contract farming arrangements, albeit ostensibly tipping the balance of power against TNCs, are generally regarded favourably by the latter.
- ⁴⁴ Examples of such companies include, Acer and HTC (both consumer electronics, Taiwan Province of China), Integrated Microelectronics Inc. (the Philippines), LG and DA Corporation (electronics, Republic of Korea), Piramal Health Care (India), Sonda (IT-BPO, Chile), Trinunggal Komara (garments, Indonesia), Varitronix (electronic displays, Hong Kong (China)) and Yue Yuen (footwear, Taiwan Province of China) (*WIR06*).
- ⁴⁵ Other electronic contract manufacturers, especially Taiwanese, are also being granted an increasing number of patents – e.g. Inventec and Quanta – but the numbers they are assigned are a long way behind Hon Hai.

- ⁴⁶ “IFI CLAIMS announces top global companies ranked by 2010 U.S. patents”; available at: www.ificlaims.com.
- ⁴⁷ The other three are from the Republic of Korea.
- ⁴⁸ Acer and AsusTek spun off their contract manufacturing arms as “Wistron” and “Pegatron” respectively.
- ⁴⁹ However, there is also a significant market in renovated machinery (Rasiah, 2009).
- ⁵⁰ Important local industries for wealth and job creation such as construction and real estate benefit from the growth of commercial and shopping centres based on the expansion of franchise networks.
- ⁵¹ In this framework, conflicts arise because of concern that foreign brands and products alter local consumers’ preferences or habits (i.e. losing touch with host-country culture and traditions) (Grünhagen, Witte and Pryor, 2010).
- ⁵² See, for instance, Magleby (2007).
- ⁵³ Project Shakti was launched by Hindustan Lever (Unilever’s business in India) in 2000 to distribute its soaps and shampoos, by the end of 2009 employing some 45,000 “Shakti entrepreneurs”. See www.unilever.com.
- ⁵⁴ Source: www.tourismpartnership.org.
- ⁵⁵ This can occur through “crowding out” (where NEMs out-compete local firms which do not enjoy the advantages of transfers of knowledge and skills from TNCs), or its obverse, “crowding in”.
- ⁵⁶ In Egypt, a new Ministry for Communication and Information Technology (MCIT) was established and assigned the mandate to upgrade the national telecommunication system to enhance Egypt’s insertion on global value chains. See the national strategy of Egypt’s Ministry for Communication and Information Technology (MCIT), available at: www.mcit.gov.eg.
- ⁵⁷ In the Philippines, the government not only offered tax benefits for the relocation of business processing operations by foreign companies, but it also established centers of excellence to support the training of its labor force. The industrial policy authorities also supported the creation of linkages through an “Industry Cluster” approach to enhance industrial competitiveness, promote investments in the countryside and develop micro, small, and medium-sized enterprises. See the Philippines’ Department of Trade and Industry: www.dti.gov.ph/dti.
- ⁵⁸ The record of active credit support is mixed. While on the one hand subsidized finance does increase access to credit for SMEs, it does so at the risk of lower profitability and non-performance of borrowers (UNCTAD, 2001).
- ⁵⁹ Because factoring relies less on collateral, it can assist access to finance for producers who are less creditworthy than their clients (often TNCs). It can also be particularly attractive in financial systems with weak commercial laws and enforcement (Klapper, 2006).
- ⁶⁰ UNCTAD conducted a survey of 238 IPAs on their role in attracting NEMs. A total of 91 questionnaires were completed, representing an overall response rate of 38 per cent. Respondents included 27 IPAs from developed countries, 54 from developing countries and 10 from economies in transition (UNCTAD, forthcoming c).
- ⁶¹ See “Franchising overview” on the Austrade website available at: www.austrade.gov.au.
- ⁶² See a list of export promotion activities related to franchise at MATRADE’s website, available at: www.matrade.gov.my.
- ⁶³ Richter, John (2009). “Ex-Im Bank: a valuable partner for ifa members seeking to export”, *Franchising World*, October; available at: www.franchise.org.
- ⁶⁴ For a discussion of the criteria for determining a “covered investment” and the role of development considerations in this context, see UNCTAD (2011 d).
- ⁶⁵ See MIGA’s website: www.miga.org.
- ⁶⁶ While there is no international legally binding competition instrument, a series of non-binding instruments offer recommendations on the design of domestic competition laws (e.g. the Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices or the UNCTAD Model Law on Competition). In terms of regional initiatives, European competition law stands out as supranational law directly applicable in EU Member States, but competition rules also exist in RTAs (UNCTAD, 2000).