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Exposure of the business services industry to international competition

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Preface

The business services industry has been one of the fastest-growing services industries in the Dutch economy. The development of this industry is also getting important macroeconomic dimensions.

Between 1990 and 2000, business services industry alone contributed 23 per cent of value-added growth, and 31 per cent of employment growth of the total Dutch market sector. The business services industry, including several ICT branches, is widely regarded as strategically important for innovation processes. A worrying aspect is that labour productivity growth in the business services sector is lagging behind the rest of the market sector. CPB initiated an internationally comparative study on growth prospects of the business services industry. Its aim is to analyse characteristics of this industry's development in the Netherlands, to determine its strengths and weaknesses, and to identify growth-enhancing policy options.

The CPB project on the business services industry will yield several publications. The present report is the first one of them. It focusses on the exposure of the business services industry to international competition. Services industries used to be regarded as sheltered sectors, meaning that they are protected from world market competition. For the business services industry, there are important indications that this view is rapidly losing its validity. The domestic market for business services is increasingly exposed to import competition and inflows of direct investment by foreign business services suppliers. Conversely, foreign markets have become more and more important for domestic firms in the business services industry. This may contribute to more competition and more efficiency in the business services industry. The report finds that regulation policies still form an impediment to further internationalisation in this industry.

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Henk Don,
Director CPB

Executive summary (in dutch)

Dit rapport onderzoekt de rol van buitenlandse concurrentie in de zakelijke dienstverlening. Nederland wordt daarbij vergeleken met andere OESO-landen. In beeld wordt gebracht hoe marktregulering door de overheid buitenlandse concurrentie inperkt dan wel stimuleert. Doel van het onderzoek is om het inzicht te vergroten in de toekomstperspectieven van de Nederlandse zakelijke dienstverlening.

Achtergrond van het onderzoek

De zakelijke dienstverlening omvat verschillende branches, uiteenlopend van softwarehuizen, belastingadviseurs, beveiligingsbedrijven, en reclamebureaus tot ingenieursbureaus en schoonmaakbedrijven. Al deze branches hebben gemeen dat ze hun diensten aan bedrijven leveren in plaats van aan consumenten. Veel producten van de zakelijke dienstverlening zijn kennisintensief. Deze inputs worden van strategische belang geacht voor het innovatievermogen van andere bedrijfstakken.

De zakelijke dienstverlening is één van de snelst groeiende bedrijfstakken in Nederland. In macro-economische zin is de bedrijfstak zeer belangrijk geworden. Tussen 1990 en 2000 was deze goed voor bijna een kwart van de groei van de toegevoegde waarde in de Nederlandse marktsector, en ongeveer één derde van de werkgelegenheidsgroei in de marktsector. Een zorgwekkende ontwikkeling, zowel in Nederland als in de benchmarklanden, is dat de arbeidsproductiviteit in de zakelijke dienstverlening nauwelijks meer groeit.

Het CPB verricht een internationaal vergelijkende studie naar de groeivoorzichten van de zakelijke dienstverlening. Het doel is vast te stellen wat de specifieke sterkten en zwakten zijn van deze bedrijfstak in Nederland. Daarnaast stelt het onderzoek vast welk beleid tot meer groei en betere productiviteitsontwikkeling in de zakelijke dienstverlening zou kunnen leiden. Het project zal uitmonden in enige afzonderlijke publicaties. Het nu voorliggende rapport onderzoekt hoe de internationalisatie van de bedrijfstak zakelijke dienstverlening zich recentelijk ontwikkelde. Ook wordt geanalyseerd of en hoe marktregulering van overheidswege buitenlandse concurrentie remt dan wel stimuleert.

Wat zegt de theorie over internationalisatie in de zakelijke dienstverlening?

Ondernemers die een buitenlandse markt willen betreden, kunnen in principe kiezen tussen drie mogelijkheden om dat te realiseren. Ze kunnen hun producten naar het buitenland exporteren. Ze kunnen een productievevestiging in het buitenland opzetten. Of ze kunnen hun product tegen betaling door een buitenlandse onderneming laten maken. Micro-economische theorieën over buitenlandse ondernemingsexpansie hebben een aantal dingen te zeggen over dit besluitvormingsvraagstuk. Het draait steeds om de kosten en opbrengsten van de drie internationaliseringsstrategieën: exporteren, directe investering en licentieverlening. Bij de licentiestrategie laat men een deel van de verwachte winsten aan de buitenlandse licentienemer,

maar men hoeft zelf minder investeringen in vaste activa te doen. Wat de optimale strategie is, hangt sterk af van de aard van de bedrijfstak en het type concurrentie dat er heerst. De recentere theorieën voorspellen dat de betekenis van directe investering in het buitenland *toeneemt* naarmate in de bedrijfstak:

- immateriële activa meer van belang zijn voor het concurrentieproces;
 - handelsbarrières en transportkosten een grotere rol spelen bij export;
 - het product moeilijker internationaal verhandelbaar is;
- en *afneemt* naarmate in de bedrijfstak:
- schaalvoordelen van belang zijn in elke afzonderlijke productievestiging; en
 - overheden belemmeringen opwerpen voor de markttoegang en het functioneren van buitenlandse dochterbedrijven.

Hoe zit het in de zakelijke dienstverlening met de genoemde factoren? Allereerst is de internationale verhandelbaarheid van het product veelal beperkt. Bij veel zakelijke diensten is het moeilijk productie en verbruik van de dienst ruimtelijk en in de tijd te scheiden. Dat betekent dat de leverancier van het product zich in enigerlei vorm naar het buitenland moet begeven. Schaalvoordelen op het niveau van de afzonderlijke productievestigingen zijn van weinig betekenis. Des te meer echter spelen immateriële activa een rol. Daarbij kan gedacht worden aan kennis, expertise, reputatie, kwaliteit van de werknemers, en netwerkervaring. Grotendeels zijn de immateriële activa ofwel moeilijk overdraagbaar naar buitenlandse licentienemers, of wanneer dat wel kan, is de overdracht onomkeerbaar. Een buitenlandse licentienemer die een aantal jaren in keuken heeft gekeken, kan veranderen in een goed toegeruste concurrent. Verwacht mag worden dat ondernemingen in de zakelijke dienstverlening het opzetten van een buitenlandse vestiging zullen prefereren boven de licentiestrategie.

Toekomstige buitenlandse concurrentie in de bedrijfstak zakelijke dienstverlening zal de vorm krijgen van meer import, maar vooral van meer buitenlandse directe investeringen. Hoeveel en in welke onderlinge verhouding, dat zal vooral van twee zaken afhangen. In de eerste plaats van technologische ontwikkelingen die de verhandelbaarheid van de dienstenproducten vergroten (denk aan ICT). En in de tweede plaats zal het afhangen van overheidsregels voor toegang tot en voor het functioneren op buitenlandse markten.

Welke bedrijven in zakelijke dienstverlening doen aan internationalisering?

De bedrijfstak kent een zeer ongelijke spreiding van buitenlandse activiteiten. Veruit de meeste bedrijven in de zakelijke dienstverlening zijn niet of nauwelijks actief op buitenlandse markten. Vele kleine bedrijven hebben slechts lokale of regionale markten als werkgebied, en hun klanten zijn vooral kleine of middelgrote ondernemingen. Zij ondervinden niet of nauwelijks buitenlandse concurrentie. Aan de andere kant van het bedrijvenspectrum vinden we een selecte groepen van multinationale ondernemingen – vaak slechts een handvol per branche – waarvan

de activiteiten sterk internationaal gericht zijn. Ze zijn elkaars belangrijkste concurrenten in de vele landen waar ze vestigingen hebben. Hun klanten zijn vaak zelf multinationale concerns. De lokale vestigingen zijn slechts in beperkte mate op export gericht. Tenslotte is er een beperkte middengroep van grote, voornamelijk nationaal-georiënteerde bedrijven in de zakelijke dienstverlening. Ze doen aan export en hebben soms enkele buitenlandse vestigingen. Deze middengroep heeft het meest te maken met buitenlandse concurrentie op de binnenlandse markt.

Internationale handel in zakelijke dienstverlening

De zakelijke dienstverlening vertegenwoordigt ongeveer vijf procent van de totale Nederlandse import en export. Het handelsaandeel neemt nog gestaag toe, evenals in de meeste andere OESO-landen. Dat blijft zo wanneer we corrigeren voor het feit dat de zakelijke dienstverlening een steeds groter gedeelte van de binnenlandse economie vormt. De conclusie hieruit is dat binnenlandse markten voor zakelijke dienstverlening steeds opener worden voor buitenlandse concurrentie. Ze zijn echter nog steeds minder open dan de markten voor industrieproducten.

Rol van buitenlandse investeringen in de zakelijke dienstverlening

De vorm van de buitenlandse concurrentie in de zakelijke dienstverlening verschuift van importen naar lokale activiteiten door buitenlandse dochterondernemingen. Deze laatsten verzorgen een steeds groter deel van het binnenlands aanbod.¹ Voor alle onderzochte landen geldt dat sinds het midden van de jaren '80 de inkomende directe investeringen in de dienstensector sterker groeien dan de internationale dienstenhandel. De betekenis van buitenlandse investeringen kan ook worden gemeten door ze uit te drukken als percentage van de totale investeringen in vaste activa die door de bedrijfstak zakelijke dienstverlening worden gedaan. Voor de inkomende directe investeringen in Nederland nam dit percentage spectaculair toe van circa 20 begin jaren '90 tot circa 60 in 1998. Ondanks deze trends bleek in een aantal landen dat medio jaren '90 het omzetaandeel van buitenlandse dochterbedrijven in de zakelijke dienstverlening nog steeds minder groot is dan bijvoorbeeld in de verwerkende industrie.

Buitenlandse concurrentie en marktregulering van overheidswege

De zakelijke dienstverlening heeft in de meeste onderzochte landen nog veel te maken met marktregulering door de overheid. De marktregulering gebeurt soms direct, soms via binnenlandse branche-organisaties waarvan aanbieders in een bepaalde branche verplicht lid moeten zijn. Vooral kennisintensieve diensten als accountancy, juridische diensten, belastingadvies, notariaat, ingenieurs- en architectendiensten zijn in de meeste landen onderworpen aan tal van richtlijnen en verplichtingen. Die hebben betrekking op de diensten

¹ Totale binnenlandse aanbod bestaat uit importen plus binnenlandse productie minus export.

zelf, op de kwalificaties van beroepsbeoefenaren, en op de manier van bedrijfsuitoefening (rechtsvorm, tariefvaststelling, verkooppromotie, 'branchevreemde' activiteiten). Het doel van de marktregulering is om kwalitatief goede en degelijke dienstverlening te verzekeren. Van geval tot geval moet bezien worden of dat opweegt tegen de nadelen ervan. Sterke brancheregulering beperkt de toetreding en creëert op schaarste gebaseerde winsten. Bovendien leidt het doorgaans tot minder innovativiteit en dynamiek.

Gelijke behandeling buitenlandse aanbieders van zakelijke dienstverlening

'Gelijke monniken, gelijke kappen' geldt nog niet voor binnen- en buitenlandse aanbieders van zakelijke diensten. Buitenlandse aanbieders van vooral kennisintensieve zakelijke diensten hebben nog met diverse aanvullende eisen te maken: de verplichting om lokale kantoren te hebben, beperkingen aan buitenlandse eigendom van bedrijven, verplichtingen om een lokale directie en staf te hebben, beperkingen aan moedermaatschappijen met 'branchevreemde' nevenactiviteiten, nationaliteit van beroepsbeoefenaren, niet-erkenning van buitenlandse diploma's, en herscholings-eisen. De aanvullende eisen voor buitenlandse aanbieders van zakelijke diensten -ook wanneer ze oorspronkelijk niet als zodanig bedoeld zijn- werken uit als niet-tarifaire protectionistische maatregelen. De EU heeft wel enige aanzetten gegeven in de richting van liberalisering en harmonisering, maar het probleem is nog niet uit de wereld. De WTO becijferde dat in de productieve diensten² het effect van niet-tarifaire handelsbelemmeringen overeenkomt met een invoertarief van rond de 25 procent in de meeste benchmarklanden. Dit legt een stevige rem op buitenlandse concurrentie in de zakelijke dienstverlening. Omdat meer concurrentie in principe leidt tot een efficiëntere bedrijfsvoering en lagere prijzen, vallen welvaartswinsten te behalen door het vrijer maken van de markttoegang door buitenlandse bedrijven. Aanvullend en meer geactualiseerd kwantitatief onderzoek naar handelsbelemmerende effecten van marktregulering in deze bedrijfstak zou echter op zijn plaats zijn.

Verschillen in marktregulering tussen landen, positie van Nederland

Tussen de landen bestaan flinke verschillen in de vorm en striktheid van dergelijke marktregulering. Nederland en Groot-Brittannië behoren tot de landen waar de zakelijke diensten het meest geliberaliseerd zijn. Duitsland, Frankrijk, de USA, Italië en België kennen veel striktere eisen voor delen van de zakelijke dienstverlening. Waar het gaat om discriminerende bepalingen voor buitenlandse aanbieders van zakelijke diensten, behoort Nederland opnieuw tot de meest geliberaliseerde landen. Dit heeft twee belangrijke gevolgen. Ten eerste is de Nederlandse zakelijke dienstverlening reeds relatief vroeg blootgesteld aan buitenlandse concurrentie, waardoor efficiëntie- en leereffecten zijn opgetreden. Ten tweede zijn

² Dat is zakelijke dienstverlening plus banken en verzekeringen.

de Nederlandse bedrijven daardoor in een goede positie gekomen om te profiteren van groei in buitenlandse markten, zodra daar deregulering en liberalisering van de zakelijke dienstverlening hun beslag krijgen.

Welvaartsimplicaties en beleidsaandachtspunten

- Het versterken van de exportpositie van met name het midden- en kleinbedrijf in de zakelijke dienstverlening lijkt overwegend positieve welvaartseffecten op te leveren in de vorm van toegevoegde waarde, werkgelegenheid, schaalvoordelen en leereffecten. Het rapport noemt aandachtsgebieden die een rol kunnen spelen bij een dergelijk beleid. Daarbij gaat het onder meer om internationale harmonisatie van kwalificatiecriteria voor dienstverleners, het bevorderen van een vrijer opereren van dienstverleners in het buitenland, en het opzetten van een Europees systeem van kwaliteitsgaranties voor producten van de zakelijke dienstverlening.
- Welvaartswinsten voor de binnenlandse economie kunnen ontstaan wanneer de import van zakelijke diensten meer wordt geliberaliseerd. Het leidt tot positieve spillover-effecten op het gebied van technologie, kennis en productkwaliteit. Het zal de concurrentie op de binnenlandse markt voor zakelijke diensten doen toenemen, met prijs- en kwaliteitsvoordelen voor afnemende bedrijfstakken. Mits zaken als kwaliteit, aansprakelijkheid en betrouwbaarheid goed geregeld zijn, zal importliberalisering overwegend positief uitpakken.
- Belangrijke welvaartswinsten kunnen eveneens ontstaan door het wegnemen van belemmeringen voor de nieuwe vestigingen van buitenlandse ondernemingen in de zakelijke dienstverlening. Het versterkt de binnenlandse concurrentie en de verwachte schaalvergroting zal tot kostenbesparingen en meer efficiëntie leiden. Waar het gaat om overnames van bedrijven door buitenlandse multinationals kan een concurrentietoets door de Nederlandse Mededingings Autoriteit volstaan.
- Actieve ondersteuning van verdere WTO-initiatieven (GATS) voor liberalisering van de handel en directe investeringen in de zakelijke diensten zal voor de Nederlandse bedrijfstak positieve effecten hebben.

1 Introduction

This report analyses recent trends in the exposure of the business services industry to international competition, and the role of regulatory policies in this process. Specific attention is given to the development of international trade and foreign direct investment.

The business services industry is one of the fastest-growing industries in most OECD countries. For policy makers, it is important to know whether, or to what extent, this has been a temporary growth spurt. CPB started a research project on future growth prospects of business services industry. The project also aims to identify policies that may enhance growth and performance characteristics of this industry. The form of an internationally comparative study was chosen, so that general industry trends and particularities of the Dutch business services industry can be distinguished. The benchmark countries are the USA, Japan, France, Germany, UK, Belgium and Scandinavian countries. The present report is the first in a series of project publications.³ It investigates the role of international trade and direct investment in the business services industry. Special attention is paid to the impact of market-regulation policies on international trade and investment in the business services industry. Henceforth, ‘business services’ will be abbreviated as BS.

The internationalisation of the BS industry occurs through two channels, trade and foreign production. Table 1.1 sketches the dominant forms of internationalisation in the BS industry. Foreign direct investment is the border-crossing financial transaction that mostly goes along with starting production in another country. Trade and direct investment can be competing or complementary forms of internationalisation, depending on the choice alternatives available to a firm. Some BS products, like standard software packages, can be stored and shipped in boxes. International tradability of most consumer and business services is, however, still curbed by the fact that production and consumption cannot be separated across time and place. In that case, export can only take place when either the service provider or the service client travels abroad.

1.1 Structure of this report

Chapter 2 describes the main theoretical strands for an integrated analysis of international trade and investment in the BS industry. This survey of the theory is used for selecting an

³ A separate CPB memorandum analyses the sources of structural growth of the business services industry in the past, and makes some projections of its future growth. Another paper will be published that develops an explanatory model for the lagging productivity performance of business services industry. Finally, a forthcoming CPB Document summarises all project findings and identifies the possible policy implications.

Table 1.1 Classification of international activities conducted by BS firms

Internalisation mode	Specific forms
Exports	<ul style="list-style-type: none"><input type="checkbox"/> Embodied services (e.g. report, letter, video)<input type="checkbox"/> Wired services (e.g. telephonic advise, fax, internet download)<input type="checkbox"/> Domestically located service exports (e.g. legal services provided to a foreign client in the home market, call-centre services)<input type="checkbox"/> Personnel travelling market abroad to deliver a service (e.g. advise foreign client or present a report)<input type="checkbox"/> Intra-firm exports (e.g. services delivered from the home country to foreign clients via a local office in the overseas market)
Foreign presence ^{a)}	<ul style="list-style-type: none"><input type="checkbox"/> Export delivery system<input type="checkbox"/> Service production facility, producing services for the local market and/or other foreign markets<input type="checkbox"/> International production unit (e.g. data entry facility or computer programming unit ; or, in case of management consultants or market research firms, a unit involved in collecting data on local markets to be used in other countries)<input type="checkbox"/> Operations in conjunction with other firms, local or international, to provide services to a particular client (e.g. consortia of firms often used in the computer services sector)

Note: a) This includes wholly or majority-owned subsidiaries, joint ventures, franchise or licensing operations, partnerships, associate firms, reciprocal arrangements, together with other methods of local representation. Source: Roberts (1999. p. 74).

interpretative framework to be used later on. Subsequent chapters deal more in depth with the role of international trade and direct investment in the internationalisation process.

Chapter 3 builds some bridges between general theory and empirical data on internationalisation in business services industry. Chapter 4 investigates whether empirical trade data can confirm the predictions derived from the theoretical framework. Chapter 5 does the same for direct investment by BS firms. Both international trade and investment patterns can be strongly affected by regulation differences in national markets. Chapter 6 presents an overview of the main regulation issues at stake, differentiated by BS branch. The chapter also investigates possible welfare impacts of more deregulation. Chapter 7 sketches the potential implications of four factors on future internationalisation of the BS industry: WTO-related liberalisation of trade in services, technological progress, deregulation of national BS markets, and further European integration. Finally, chapter 8 gives the conclusions. It also puts forward a number of policy issues in relation to internationalisation of the BS industry.

1.2 Data limitations

International trade in services got more attention since the 1990s. It became increasingly important during the Uruguay Round and subsequent trade negotiations. The General Agreement on Trade in Services (GATS), agreed during the WTO Uruguay Round, is the first set of legally enforceable disciplines and rules ever negotiated and agreed at the world level to

cover international trade in services. An important new element in the GATS is that it not only covers border-crossing trade in services, but also services supplied by local subsidiaries in another country. This calls for integrated analysis of trade and direct investment in services.

Following the GATS framework, cross-border supply of BS products can take four trade 'modes':

- A. Cross-border supply without physical movement of producer or consumer;
- B. Consumer comes to producer country;
- C. Producer comes to consumer country (local production subsidiary abroad); and
- D. Trans-border movement of service-supplying personnel.

Estimates by Karsenty (1999) bring out that modes A and C form by far the largest share of world services trade.⁴ The GATS drew full attention to the fact that data on direct investment flows in services industry were even worse than data on trade flows in services.

International trade in services in the past received a step-motherly treatment in foreign trade statistics. Partly this resulted from the intangible aspects of services and a 'goods bias' in economic statistics, partly it resulted from the way of registration. In most countries, services used to be registered by monetary authorities rather than by customs authorities. Because of tariff differentiation, customs authorities required detailed product specifications, leading to satisfactorily reporting of material goods trade. Monetary authorities did not have a strong incentive for detailed registration of the foreign currency flows associated with international trade in services. Under the catch-all balance of payment heading 'other services', *payments* for business services used to be aggregated with other financial flows. A proper registration of the concomitant *physical* services transaction - with respect to origin, destination, and product specification - was lacking. Only total value of transactions was given, without specification of price and volume aspects. Sometimes, services trade was even measured as a net flow, rather than giving data on ingoing and outgoing trade flows. Small wonder, therefore, that in many countries the correspondence between services trade data and national account data was problematic (e.g. Hoekman 1995; Whichard 1999). In 2000, OECD for the first time published its SITS database, Statistics on International Transactions in Services. For most benchmark countries in this study, the data only cover the period 1991-1996. Annex 2 gives more details on the BS trade data sources used in this report.

Similarly, the picture on foreign investment data for the business services industry is also still quite depressing, with exception of the USA. Statistical reporting of foreign direct investment by De Nederlandsche Bank, particularly in relation to the level of industry detail, still does not match the standard set by USA. Annex 3 describes the available data sources on the foreign investment in the BS industry.

⁴ Cf. estimates in Annex 2.

2 Theoretical perspectives on internationalisation through trade and direct investment

Elements from the theoretical literature are synthesised in this chapter to an integrated framework for the analysis of internationalisation through trade and direct investment (section 2.1). A next step is to add dynamic elements, establishing links between changes in internationalisation behaviour and changes in market structure (section 2.2). This section also applies the general framework to the services industry more in particular. Finally, section 2.3 deals with the question whether the predicted micro-economic behaviour will also be traceable at industry level.

2.1 Interpreting internationalisation with the 'eclectic' framework

The analytical literature on multinational companies is rather shallow, while there is a host of descriptive studies on the topic. This section sketches some theoretical elements that can be used as an interpretative framework for internationalisation tendencies in the BS industry.

Multinational enterprises have long been considered as an anomaly in the Heckscher-Ohlin theory of international trade. Multinationals do not arise when international trade is analysed in the perspective of perfect competition in product and factor markets. Different national factor endowments and national differences in production technology can explain international trade patterns, but not the growing importance of multinational companies. The traditional answer to the question why multinational companies produce abroad instead of exporting their product, refers to transport costs. But why don't they have their products made by licensed producers abroad? No satisfactory answers came up until one allowed for increasing returns to scale, oligopolist competition and transaction costs.

The so-called 'eclectical approach' of Dunning (1973, 1981, 1988) still dominates the analytical literature, even though it is more a taxonomy than a theory. The theory is labelled eclectic, because it integrates elements of several preceding theories.⁵ Dunning starts from the perspective of production decisions of individual firms. According to him, a firm embarks on multinational production when at the same time the following three conditions are met:

⁵ Apart from the theory of factor endowments, Dunning uses elements of the core asset theory (Hymer 1960, 1976) who stresses the importance of a monopolist advantage (often immaterial) in the home market that can be exploited internationally. He also builds on industrial organisation theory. Possibly another influence came from the 'early' product life-cycle theory of Vernon (1966) according to which company-specific advantages are first exploited on the home market, then exported, while a next exploitation phase begins after foreign direct investment.

- The firm has an **ownership advantage (O)**: it owns a specific advantage vis-à-vis other firms that it can exploit commercially in particular markets. The ownership advantage often has an intangible character. Competitive advantage can be derived from several types of ownership advantages: reputation, access or familiarity with market channels, brand name, knowledge (tacit or patented), technology, innovative capacity, organisational or financial strength.
- Producing locally in a foreign country yields a **location advantage (L)** above exporting to this country, due to for instance low wages, import tariffs, government regulation, technological climate, or cheap raw materials.
- There must be an **internalisation advantage (I)** when the firm itself undertakes production in the foreign country rather than selling or licensing the ownership advantage to another company in that country. Transaction costs (for negotiating, contracting, monitoring, enforcing, and imposing sanctions) form the basic reason for internalisation advantages.

Table 2.1 Eclectical theory Dunning: decision framework for internationalisation strategy

		Location advantage (net benefits of production in foreign country)	
		YES	NO
Internalisation advantage	YES	O, L, I Multinational production	O, I Export
	NO	O, L Licensing or selling ownership advantage to foreign company with location advantage	O Remain in home market; license or sell ownership advantage to domestic company

This approach can be used for presenting the firm's internationalisation options in a matrix format. The symbols **O**, **L**, and **I** in Table 2.1 indicate which of the conditions are met. In the literature on foreign direct investment,⁶ considerable unanimity exists on the finding that distance and market size are extremely important in determining where firms establish their foreign affiliates. Adjusting for market size, a large share of investment stays close at home. Conversely, adjusting for distance, a large share of investment heads towards the countries with the biggest markets (Shatz and Venables 2000). The advantage of establishing a new firm in a large market is caused by the interaction between scale economies and transport costs. Scale

⁶ According to the IMF Balance of Payment Manual, direct investment is a transaction in which a company from one country participates in equity of a company in another country with the aim of acquiring a lasting control. To operationalise the 'lasting control' element and to distinguish such flows from portfolio capital transactions, a threshold of 10 per cent equity participation is used. Direct investment flows are not restricted to new foreign participations. Investment credits, intra-company current account credits and purchase of real estate for existing foreign subsidiaries are also regarded as direct investment flows.

economies can be derived from investments in production equipment or in marketing effort for new brand names.⁷

Decision framework for multinational production: Hirsch model (1976)

Suppose firm X from home country B discovers a demand for its products in country A . The firm has the following options:

- export from B to A ;
- start production in A ;
- have its products produced by local companies in A .

Four groups of costs play a role in the decision process:

C_i : production costs in country i ($i = A, B$)

K : additional costs of other firms in A that imitate the product of X

M : Additional costs that arise when the products of X are exported from home country B to country A (transport, handling, import tariffs, costs intermediary firms)

Z : Additional costs of running production in country A , compared to production costs of local producers

The firm undertakes exports if the ownership advantage vis-à-vis foreign producers is sufficient to compensate the latter's imitation costs:

$$(C_B + M) < (C_A + K)$$

The firm starts a local production subsidiary in country A , if doing so is even cheaper than exporting. Hence, for multinational production it must hold that:

$$(C_A + Z) < \min [(C_A + K) , (C_B + M)]$$

Dunning's eclectic theory offered a framework for much subsequent work on multinational companies. Hirsch (1976) formalised certain aspects of Dunning's decision framework (cf. text box above). A group of authors⁸ concentrated on internalisation aspects: why do multinational companies prefer hierarchical control to foreign activities rather than market control over these activities? Knickerbocker (1973) gave one answer to that question, namely that oligopolist market relations in the home country tend to be replicated in foreign countries due to parallel direct investments. By strategic direct investments in foreign markets, oligopolists pre-empt the possibility that the first-mover investment of a rivaling company could earn it a decisive market advantage in that market. Knickerbocker also found that multinational companies are often

⁷ The importance of scale effects in national markets forming part of a wider economic area like the EU, probably are limited. Braunerhjelm and Ekholm (1999) examined the scale of Swedish investments in France, Germany and the UK relative to those elsewhere in Europe. They found little consistent evidence in favour of a 'large country' hypothesis, although the UK (for other reasons) did appear to be a particularly favoured location.

⁸ E.g. Rugman (1981, 1987), Buckley (1983, 1985); Casson (1987). Rugman and Buckley argue that internalisation is the most important condition for explaining the presence of multinational companies. According to them the ownership-advantage condition is logically superfluous, because it is already implied by the internalisation advantage.

found in oligopolist industries where product differentiation and immaterial assets play an important role in the competition process.

Some remarks are in place on Dunning's eclectic theory. In fact it is a descriptive framework rather than a real theory. Essential for a scientific theory is that testable predictions can be derived from it, so that the theory is falsifiable. In case of Dunning's eclectic theory this is hardly possible. It is a loose rather than rigid synthesis of a number of partial theories and empirical findings. No attempt is made to formalise a weighting procedure for the three **OLI** conditions.⁹ Moreover, the three conditions for a decision to-go-multinational differ from case to case, often have a subjective character, and hence, are hardly quantifiable in advance. Work based on the eclectic framework therefore tends to have a casuistic character. Another limitation is that Dunning's framework has nothing to say about the development of the conditions over time.

Scale effects do not have a clear place in the **OLI** framework. Markusen made a significant contribution by integrating scale effects into the framework.¹⁰ He took a closer look at micro-level facts on the nature of ownership advantages. He found that an industry tends to have a greater proportion of multinational enterprises when the output of that industry is characterised by a high intensity of R&D, marketing expenditures, inputs of scientific and technical workers, product innovation, product complexity, and product differentiation (1995, p.174). All these explanatory variables indicate the importance of knowledge-based, firm-specific assets. Such proprietary knowledge capital can be embodied in patents or exclusive technical knowledge, copyrights, trademarks, management capabilities, market reputation, or tacit, non-codified expertise of key personnel.¹¹ Knowledge-based assets can easily be moved across space at low costs. Like public goods these assets have a non-rival character,¹² meaning that they can be supplied to additional production facilities at very low cost. Knowledge-based assets may be fragmented from production and are easily supplied as a joint input to geographically separate production facilities.

Especially the joint-input characteristic of knowledge-based assets has an implication for the efficiency of the firm and market structure. This can already be seen in the economics of multi

⁹ Dunning (1988, p. 26) formally states that the three 'advantages' interact with each other, and that their significance and configuration may change over time.

¹⁰ Cf. Ethier and Markusen (1991); Markusen (1995); Markusen & Venables (1995); Markusen et al. (1996); Markusen & Maskus (1999)

¹¹ Markusen (1995) does not differentiate between firm-owned or employee-owned distinctive assets, and therefore disregards its implications for intra-firm distribution and firm behaviour.

¹² The use (consumption) by others does not 'use up' the asset. Once the asset is available, it is difficult to exclude others from drawing the full benefit of it (non-excludability).

plant operations: a single two-plant firm only needs *one* investment in the knowledge-based asset, while two independent single-plant firms would have to do such investment twice.

Markusen's models predict that the share of multinationals in an industry will correlate **positively** with:¹³

- the importance of knowledge-based assets in the competition process of that industry, because such ownership advantages generate positive scale effects at *company*-level;
- the importance of trade barriers and transport costs incurred for servicing these markets through exports;

and **negatively** with:

- the importance of scale effects at *establishment*-level, since such scale effects make it relatively more attractive to export from large establishments in one country;
- regulation barriers and other barriers to direct investment.

The theory developed in Ethier & Markusen (1991) and Markusen (1995) makes it plausible that firms in industries with easily transferable knowledge assets prefer foreign direct investment above a licensing contract. The Markusen decision model is summarised in Annex 1 of this report. The Achilles heel for the firm that sets up a new subsidiary is that it will have to train local employees to do the job. If the training includes appropriation of the intangible knowledge assets by the local employee, the latter becomes a potential competition risk for the multinational firm.¹⁴ Fosfuri *et al.* (2001) further studied the consequences of this knowledge transfer mechanism. They show that – due to the described risk – multinational firms may even switch from direct investment to exporting, provided the product is exportable.

Dunning's eclectic framework, together with Markusen's emphasis on the role of knowledge-based company-specific assets, forms a suitable analytical tool for interpreting the internationalisation of the BS industry.

2.2 Changes in ownership advantages and internationalisation strategy

Which factors affect the change of internationalisation strategies over time? Neither Dunning's OLI framework nor Markusen's analysis of scale effects at firm level pay much attention to the dynamics of competition. Ownership, location and internalisation advantages in fact are all static concepts referring to a particular moment in time, but they are used to analyse a dynamic

¹³ Markusen (1995), Markusen and Maskus (1999a).

¹⁴ In the USA, scientists and engineers change employer every four year, and even more frequently in areas such as software and ICT. Conversely, only 20 per cent of engineers in Japan change employer in their entire career (OECD 2001a).

process. This is not satisfactory. Hence, the dynamic aspects of internationalisation strategies ask for further elaboration.

Location advantages are probably the most stable factor over time, because factor markets do not change overnight. Internalisation advantages are affected by (long-run) changes in factor markets, but also by discrete factors like technological innovation and government policies (e.g. deregulation, trade liberalisation). Especially government policies may have a large impact, but these changes are too idiosyncratic to catch them in a theoretic framework.

The most volatile condition for multinational production probably is a firm's ownership advantage (Buckley 1983,1985). It refers to the advantages a firm possesses at a particular point in time relative to its competitors. Intangible, knowledge-based assets are subject to several changes. Formerly unique product formulae or technologies become more standardised and copyable as a product-life cycle evolves and the product becomes more familiar in the market. Independent actions by exiting competitors or new market entrants affect the ownership advantage derived from firm-specific assets. Since the ownership advantage yields market rents, competing firms will constantly try to come up with similar strategies.

The dynamic character of ownership advantages was recognised early already by Vernon (1966) in his product life-cycle theory: any initial competitive advantage enjoyed by innovative enterprises is eroded or copied by competitors. Exporting the product or producing it in foreign countries may stretch a firm's competitive advantage over time. In later work, Vernon (1974, 1977) links up the change in a multinational's locational strategy with the type of oligopolistic market in which a firm operates in its home country. He discerns three stages in the development of oligopolistic markets, each stage characterised by a different foreign expansion pattern:¹⁵

- *Oligopolies built on innovations.* Leading oligopolists derive rents from technological, organisational or marketing innovations. This oligopoly type is strongly based on intangible, knowledge-based assets. The innovations are first introduced in the home market where firms initially meet a price-inelastic demand for their innovating product. The product and its production process are still insufficiently standardised, so that alternative foreign production locations cannot easily be compared on the basis of a clear-cut cost calculation. Foreign markets for the innovated product are still relatively insignificant. They are served through exports or licensing contracts with foreign companies.

¹⁵ The three stages are first given in general terms, not specified for a particular industry; later on, the stages will be applied to services industries.

- *Mature oligopolies built on scale economies.* According to Vernon (1977, p. 60-61), most industries with a high share of multinational companies find themselves in this type of oligopolies. Oligopolists derive rents from scale-based barriers to entry in production, transport, marketing or distribution. Companies are alert to each other's moves. They behave strategically in order to ensure long-term market shares, but they are also keen not to disturb market stability and collective oligopoly rents. The firms' foreign direct investments are predominantly governed by market-strategic considerations. Like Knickerbocker (1973), Vernon predicts that they pursue a defensive 'follow-the-leader' or 'exchange-of-threats' behaviour in setting up production locations in foreign markets. In this way they prevent competitors from getting structural market and scale advantages through additional sales of foreign subsidiaries.
- *Senescent or aging oligopolies* are market situations in which entry barriers start crumbling as a consequence of technological change (diminishing scale economies) or trade liberalisation. New entrants fight themselves into the market by price competition and a drastic decrease of oligopolistic rents is imminent. Prior market stability comes under pressure. Incumbents may temporarily maintain oligopolistic rents through cartel agreements and further product differentiation. Foreign expansion in this stage becomes governed by cost minimisation motives: specialised production units are set up in low-cost countries, from where products are exported to the home country and to subsidiaries in high-cost countries. Once 'worldwide sourcing' becomes important in an industry, a growing share of the industry's exports gets the character of intra-company trade.

Buckley (1985) rightly comments that the sequence from innovation-based to senescent oligopolies is not an automatic one as seems to be implied by the life-cycle derived names of the oligopoly types. Mature oligopolies may well succeed in preserving entry barriers from economies of scale, or even 'jump back' to innovation-based oligopolies by absorbing small innovating companies and making the latter's products ready for mass application or mass distribution.¹⁶ What remains important in Vernon's scheme is the link between the type of oligopoly and the forces that shape internationalisation strategies of market-leading companies. Vernon's scheme makes it possible to interpret changes in internationalisation strategies over time by showing that ownership advantages of leading firms in an industry may change as the structure of the industry evolves.

Vernon's analysis was primarily oriented towards manufacturing and mining industries. With some degree of freedom, the scheme can be translated to the situation in services industries, and to the BS industry more in particular. In BS industry, investments have - to a much larger

¹⁶ The 'jump back' strategy can be found in telecom, agribusiness (e.g. with regard to gene technologies), electronics and software industries.

extent than in manufacturing - the character of investments in intangible assets.¹⁷ This makes BS industry an attractive candidate for applying the Dunning-Markusen-Vernon analysis to the BS industry. Thus reinterpreted, we may derive predictions on dominant internationalisation strategies of BS firms operating under each of the three oligopoly types. This is done in Table 2.2. The first oligopoly type in services is one in which market positions are based on *new* knowledge-based innovation assets. This for example holds for some sub-markets of the software industry.¹⁸ Similar innovation-based oligopolies may arise in engineering, development of websites and e-commerce software.

Following the Vernon approach, the second oligopoly type in the business services industry is based on *accumulated* knowledge-based assets, like established reputations, economies of scope, trade marks or client-specific knowledge. This can be found, for instance, in top segments of the markets for economic consultancy, legal advice, international accountancy, and advertising. Again analog to Vernon, the third oligopoly type in business services is found in branches where the role of intangible knowledge-based assets is vanishing, while price competition by new

Table 2.2 Predicted dominant internationalisation strategies under different oligopoly types in services industry (Vernon-derived)

Oligopoly type	Dominant ownership advantages	Expected internationalisation strategy of market leaders
Innovation-based	Intangible, knowledge-based assets in form of <i>innovations</i> in product, production or marketing	Home market most important, foreign markets are served through exports (expatriate services) and licensing
Mature	<i>Accumulated</i> intangible assets like economies of scope, market reputation, trade marks, patents, copyrights, international client network, and client-specific knowledge. These assets form effective entry barrier for the market segments in which leading firms operate.	Foreign direct investment governed by desire for competitive stability in foreign markets. 'Follow-the-leader' behaviour replicates home-market structure in foreign markets. Exports play limited role only (specialised services).
Senescent	Entry barriers wear out due to technological change, trade liberalisation, disappearance of policy-related entry barriers. As a result, new market entrants become active. Incumbents try to preserve position through cartels, product differentiation and cost advantages derived from economies of scale and scope	Foreign direct investment led by cost minimisation strategies. Worldwide sourcing: specialised production units in low-cost countries export to home country and subsidiaries in high-cost markets. Growing intra-company trade.

¹⁷ Intangible assets had a 36 per cent share in total investments of Dutch BS industry over the period 1995-99, against 9 per cent for all manufacturing industry, and 16 per cent for metalworking and electro technical industry. The equipment renting branch was left out BS industry in this comparison (data source: CBS, CPB). Investment per unit of value added is, however, much lower in BS industry than in manufacturing, due to the labour-intensive character of BS production.

¹⁸ E.g. for business software like EDI and ERP packages. Cf. Annex 4, Table A8.

markets entrants becomes increasingly dominant in the competition process. New market entrants can also be medium-sized companies fighting their way into the top segment of national markets that thus far formed the domain of large, international companies. Established top firms will make more use of subsidiaries in low-cost countries and worldwide sourcing.¹⁹ Apart from worldwide sourcing, established firms in aging BS oligopolies may slow the dissipation of oligopolistic rents by lobbying for new market entry regulation, by applying further product differentiation and by exploiting profitable niche markets.

2.3 Traceability of predicted micro-economic patterns at industry level

Can the predicted micro-economic pattern, derived from the theoretical framework, also be found at industry level? In a stable industry, the predicted pattern should also be traceable at industry level. However, structural market change and government regulation may to some extent blur the picture.

When the industry is in a structural transformation phase (rapid growth or decline), intra-industry developments can interfere with the predicted micro-economic pattern. The BS industry in most OECD countries finds itself in a structural growth phase, with growth rates well above GDP growth.²⁰ As a corollary, we can expect high entry rates and a relatively high share of small firms for which foreign direct investment is not yet a feasible expansion strategy. This industry composition effect leads to underrating the importance of outgoing FDI as an expansion strategy for incumbents. On the other hand, fast structural market growth creates opportunities for foreign BS multinationals and incoming FDI flows.

Changes in government policy (market deregulation, liberalisation) can also cause shifts in the importance of FDI as an expansion strategy. Regulation of national markets is – as will be shown in chapter 6 – an important element in the competitive environment of several BS branches. The consequence is that deregulation of national markets can have a heavy impact on competition in those branches: new market entry, new organisational forms, new technologies, alliances with firms in other branches or foreign commercial activities. A standard effect of

¹⁹ An example of a senescent BS oligopoly is the market for data processing services; during last decade firms increasingly used low-cost countries like Mexico and Puerto Rico for standard data processing jobs (e.g. booking data for airlines, input of company data for Dun & Bradstreet). A similar development is found for parts of the market research and opinion-polling branches; in particular call-centre services are increasing sourced out to Indian companies that reportedly are about 40 per cent cheaper to run than US call centres (Merchant 2001). Finally, standard software modules are increasingly outsourced to subsidiaries or subcontractors in India (cf. Annex 4, Table A11).

²⁰ Indications for this are found in OECD (1999d), Commission of the European Communities (1998).

market deregulation is that imports and incoming foreign direct investment become more important. These are pro-competitive effects that potentially weaken the position of incumbent oligopolists. However, entering large companies could also be in the best position to take full advantage of new opportunities (e.g. freedom to form diversified BS firms, exploiting new technologies). While the impact of deregulation and trade liberalisation on imports and outgoing foreign direct investment is rather straightforward, no general prediction is possible as to how these factors will affect exports and outgoing foreign direct investment. Much depends on the nature of the deregulated issues. Hence, no general *a priori* predictions are allowed as to the effect of deregulation on oligopolistic competition, international trade and direct investment by BS firms.²¹

It is a matter of empirics whether structural market growth and changes in government regulation disturb the predictions of the Dunning-Markusen-Vernon framework. If intangible assets play a key role in competition in foreign product markets, producers will increasingly substitute their exports by local production in that market area.²² Strong growth of the domestic market makes it more attractive for foreign firms to set up a local subsidiary that supplies the service product directly to local clients. At a country level, the empirical test of this general prediction for BS industry can be split into two stages:

- *Higher growth of domestic BS demand results in a lower share of imports in domestic BS supply* (i.e. the change in import share is negatively correlated with the change in domestic BS demand).
- *Higher growth of domestic BS demand results in a higher share of production by multinational-owned subsidiaries in domestic BS supply* (i.e. a positive correlation between the change in domestic BS demand and the share of foreign-owned subsidiaries in domestic BS supply).

Mutatis mutandis, the theory also applies to export performance. A simplified formal version of the testable model and both hypotheses is presented in the text box on next page. Data requirements for an empirical test of the export-related prediction are quite high. One needs details on the country composition of an industry's exports, on the growth performance of the foreign product markets, and on the country composition of an industry's foreign direct investment. Given the data problems for the BS industry (cf. section 1.2), we will therefore restrict the empirical test to the relation between imports, direct investment and domestic market growth. The trade prediction will be tested in chapter 4. The second prediction on the growing importance of foreign direct investment is to be tested in chapter 5. Before arriving at this test, chapter 3 builds bridges between theory, formulated at a general level, and empirical data on a specific industry like business services.

²¹ In cross-section regressions (across countries), these differences will end up in the regression constant, while in time series regressions per country, they will show up as national differences in regression constants.

²² Note that these are imports for the receiving country.

Simplified formal version of the model and both testable hypotheses

The supply of BS products by firms in home country i to foreign market j (BSS_{ij}) takes place in two forms: production by local subsidiaries in market j ($BSLOC_{ij}$) or exports from the home country to country j (BSX_{ij}):

$$BSS_{ij,t} \equiv BSLOC_{ij,t} + BSX_{ij,t}$$

Note that home country exports are imports for country j . Demand in market j for BS products from home country (BSD_{ij}) is determined by idiosyncratic factors of market j (e.g. regulation, protection, transaction costs) and by the development of country j 's BS market:

$$BSD_{ij,t} = \beta_{ij} BSDEM_{j,t} - \alpha_{ij}$$

in which α_{ij} indicates the idiosyncratic factors, β_{ij} is country i 's market share in country j , and $BSDEM_{j,t}$ is the total size of country j 's BS market. If firms from the home country grasp all demand opportunities in their foreign markets, it must hold that:

$$BSD_{ij,t} = BSS_{ij,t}$$

so that:

$$BSX_{ij,t} = (\beta_{ij,t} - \alpha_{ij,t}) BSDEM_{j,t} - BSLOC_{ij,t}$$
$$BSLOC_{ij,t} = (\beta_{ij,t} - \alpha_{ij,t}) BSDEM_{j,t} - BSX_{ij,t}$$

A problem for empirical testing is that neither BS trade data nor direct investment data are sufficiently available for testing the theoretical framework for the BS supply mode of individual home countries to individual foreign countries. However, testing is possible at the level of aggregate BS imports and aggregate incoming FDI flows in a particular country j . The first testable prediction is that the change in import share is negatively correlated with the change in domestic BS demand:

$$\frac{d \sum^i BSX_j}{d BSDEM_j} < 0$$

The second prediction is that a positive correlation will be found between the domestic supply share of foreign-owned subsidiaries in domestic BS supply and the change in domestic BS demand:

$$\frac{d \sum^i BSLOC_j}{d BSDEM_j} > 0$$

3 Bridges between theory and data on internationalisation in the business services industry

Section 3.1 gives a qualitative tour d'horizon of BS industry internationalisation by sketching the players in this game: what parts of the BS industry are involved in what type of internationalisation? Section 3.2 gives some impressions on branch level differences within the BS industry as to the role of multinational companies. Section 3.3 attempts to give empirical meaning to the concepts of ownership advantages, location advantages and internationalisation advantages.

3.1 Players in the internationalisation process of BS industry: a tour d'horizon

Preceding research established that BS industry is characterised by strongly segmented markets: a top segment of large global firms, an intermediary segment of national-oriented firms, and a large mass of small firms that predominantly operate in local and regional markets.²³

Accordingly, the players will be presented by market segment. This can be done only in the form of generalisations:

- A. The top segment of several BS branches is formed by a relatively small group of large firms. They are multinational companies operating on an international and often global scale, with subsidiaries in many countries. Many of their clients are themselves multinational companies, served by offering comparable products in different countries. Globalised BS firms meet each other in several national markets. Their strategic interaction is probably best described by models of oligopolist competition.²⁴ Since their activities are already highly globalised, the few global players in each BS branch do not need direct investment as a way of *entering* new national markets.²⁵ Direct investment patterns of this group of companies are governed by strategic interaction and by following general demand growth in national markets. Takeovers of existing foreign firms are used to strengthen market shares, or to enter adjacent BS branches.²⁶ For the firms in the top segment of BS branches, exports are relatively unimportant as a form of foreign

²³ Dunning (1989), Verkade (1999), Kox (2000). Cf. OECD (2000a, pp. 44-46); Baghi-Sen and Sen (1997).

²⁴ Annex 4 gives branch-level data on the importance of multinational firms in business services.

²⁵ For instance, in a BS branch like accountancy several of the current top firms have a long historical internationalisation record. British firms like Price Waterhouse, Deloitte Haskins & Sells and Touche Ross opened offices in the USA, South America and South Africa between 1900 and 1920. Peats (from London) and Marwick Mitchell (from New York) merged to form Peat Marwick Mitchell, i.e. the kernel of the present KPMG, as early as 1911 (Daniels et al. 1989).

²⁶ A host of takeovers took place when clients displayed a demand for 'one-stop shopping', i.e. integrated supply of several related business services by one firm. It led to inter-branch takeovers between firms in accountancy and economic consultancy, between legal and tax advisers, or between economic consultancy firms, software providers and suppliers of e-commerce products.

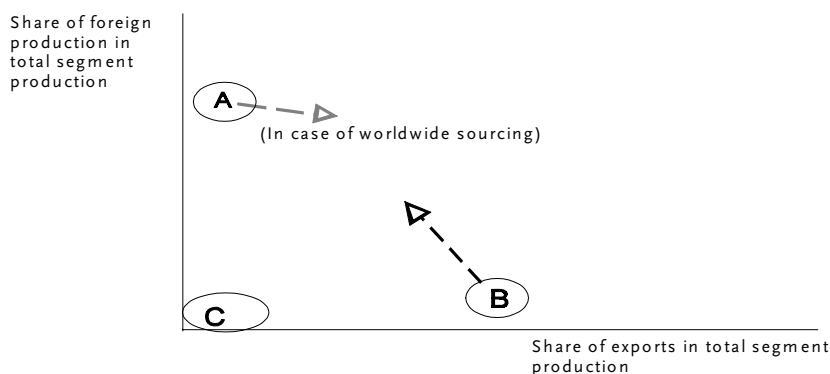
expansion. An important part of their foreign trade flows is intra-company trade in specialised products of national subsidiaries.

- B. The top segment of global players in each BS branch is followed by a layer of large national firms. They may have one or two foreign subsidiaries, but they are primarily oriented towards the national market.²⁷ In the market for large clients they often have to compete with multinational BS providers from the top segment. Exports are their prime mode of international expansion, provided that their products are exportable at all. If foreign direct investment by BS firms is to grow in the future, this layer of firms probably offers the largest potential. Future expansion through foreign subsidiaries could at least partly substitute export flows.
- C. The majority of small BS firms exclusively works for the domestic market and is not engaged in international expansion, neither through exports nor through direct investment. This broad layer of small BS companies with a national orientation forms the reason why CPB ranks BS services among the sheltered (non-tradeable) sectors of the Dutch economy. With regard to the non-tradability issue some care is warranted for two reasons. Firstly, because all BS firms experience at least some exposure to international competition from the large foreign subsidiaries. Secondly, some highly specialised small BS firms may well be internationalised, because they operate in international niche markets for this particular product.

The upshot of this horizon tour is that different parts of the BS industry have different degrees and modes of internationalisation. The majority of firms may have no direct engagement in border-crossing activities. Conversely, a small group of large firms is highly internationalised and interacts strategically in an oligopolist mode. They still dominate foreign investment flows of the BS industry. Most BS exports seem to be generated by an intermediary group of large national-oriented firms. Their growth path will have a decisive impact on internationalisation of the BS industry. Figure 3.1 graphically summarises the differences in internationalisation behaviour among the three market segments (using the A-B-C classification that was used

²⁷ An example of this market segment is the Dutch software company Ordina. In 1999 it had almost 3000 employees, most of them in the Netherlands. The company has offices in three neighbouring countries, that together account for 8 per cent of turnover. The Dutch turnover share partly consists of exports, often generated by employees temporarily travelling abroad to service foreign customers (Ordina Beheer, Annual Report 1999).

Figure 3.1 Changing internationalisation modes by segment of the BS company population



Note: A-B-C classification of company population segment explained in main text.

above). Table 3.1 shows the weak export orientation of small- and medium-sized BS firms in the Netherlands. The overwhelming majority of firms are predominantly oriented towards selling products in a local or regional market. A smaller part of the companies has a national orientation, while the group of companies with substantial international sales is generally less than ten per cent of the BS firms surveyed. Relatively more internationally-oriented firms are found in the software and engineering branches, and in the security and cleaning branches. According to MKB (2000, p.30) only 13 per cent of all small-and medium-sized Dutch BS firms had export activities in 1999. Table 3.1 does not disclose which share of these firms is a subsidiary of - or is tightly associated with - foreign companies.

Table 3.1 Geographical market orientation of SME ^{a)} business services firms in the Netherlands, 1999

Sales orientation	All firms	of which:		
		Accountancy; legal, tax and economic consultancy; advertising; publicity	Software services; architects; engineering; design consultants	Security services; industrial cleaning; training and media services
	percentage of category total			
Predominantly local or regional	51	55	48	47
Predominantly national	39	40	38	41
Predominantly international	9	5	14	11
No response	1	1	-	1
Total ^{b)}	100	100	100	100

Notes: a) small-size and medium-size enterprises with less than 250 employees. b) Due to rounding, the totals may not add up to 100 per cent. Source: NIPO Business Monitor, 4th Quarter 1999, reported in: MKB-Nederland (2000, p. 30).

3.2 Branch-level differences in the role of multinational BS firms

International competitive relations can hardly be understood at national level, or at the level of *business services in general*. The relative importance of foreign-owned subsidiaries may differ considerably between BS branches, and over time. This section provides branch-level information on international market shares and the role of foreign subsidiaries so as to provide qualitative insight in the competitive processes of these branches. The tables in Annex 4 illustrate the different roles of multinational firms in separate BS branches and the internationalisation history of that branch:

In the *accountancy* branch most accounting firms are medium-sized and small practices, even sole practitioners, which concentrate on a limited number of market segments and who do not have any formal international affiliation. However, the international top segment of this market consists of firms that have been highly globalised for many decades already (Daniels et al. 1989; Kimura 2000). This is manifested in the very large number of countries in which the 'big five' global accountancy firms are represented with local subsidiaries (Tables A6 and A7). Worldwide, the 'big five' are estimated to earn up to a third of the industry's global revenues (OECD 2000a, p.45). Below the top segment in the markets, some of the larger national-based firms cooperate in international networks, using the international network-trading name (*ibidem*).

In *advertising*, the degree of globalisation of market leaders is similar to that in accountancy, with the global players meeting each other as market leaders in different national markets. Like in accountancy, advertising multinationals tend to have clients that themselves are multinationals as well (Tables A4 and A5). Call-centre services, a labour-intensive component of the advertising and market research branch are increasingly sourced out to firms in developing countries like India (Merchant 2001).

Legal services have long been subject to strict national regulations. Until very recently, this industry was characterised by a very stable production technology and relatively low market growth. These characteristics resulted in a relatively low internationalisation degree, with relatively scarce foreign representations. In 1988, 43 of the world's top-50 law firms were either from British or US origin, with some firms from Australia and Canada (Table A9). The first firm not from these four countries was a French firm, ranking in the 92th position (OECD 2000a, p.45). During last decade, deregulation in national markets for legal services proceeded in a high pace. The result is a hectic pace of border-crossing mergers and takeovers in the legal consultancy business. Particularly law firms from the UK have been heavily involved, but recently also firms from the USA, Germany, and -at a more modest scale- Netherlands have

joined in. The extent of this internalisation process becomes clear by comparing Tables A9 and A10.

The *software* branch is subject to fast changes in technology and products, resulting in relatively strong competition and takeovers of small fast-growing firms by the more established large firms. Foreign investments form part of the adjustment process in the branch. Some parts of the software industry are footloose, making it possible to locate important sections of production in those countries where costs are lowest and/or where essential inputs (human capital, innovations) are most readily available. For this reason exports play a relatively important role in the software industry. CAP Gemini for instance is using its Dutch subsidiary as an export platform. The market for general-purpose operating systems and office software is strongly dominated by US firms (Microsoft, with firms like Corel and Oracle following far behind), often adapting their products to national markets and languages in order to take the wind from the sails of local competitors. Multinational firms form the top segment in the market for client-specific business software like EDI and ERP packages (cf. Table A8). An interesting phenomenon in the software branch is the international competition from developing-country producers. The latter have competitive advantages because of their relatively low wage levels. So far, their competitive advantage is such that their global expansion is mainly through exports (cf. Table A11).²⁸

In *architectural services*, the overwhelming majority of firms remain local or regional-based. Even the bigger US practices, which came closest to truly global architectural firms, are strongly dependent on the international activities of their US clients (OECD 2000a). International expansion mostly comes in the form of exports rather than direct investment.

Engineering firms are more internationalised in their operations than architectural services. Yet, we still find a relatively low level of international expansion through foreign direct investment (Tables A1 and A2). In the UK and USA, imports and incoming direct investment are stimulated by the withdrawal of government from market-competing engineering activities. Engineering firms experience growing competition from firms in other branches (IT, management consultancy, accountancy); these branch-alien firms offer integrated services products like

²⁸ The first signs that this may change came up in September 2000. Infosys, one of the largest Indian software companies (cf Table A11 in Annex IV) opted for a strategic alliance -no merger- with Microsoft, while another Indian software firm, SSI, took over the US software developed Albion Orion (Source: Financial Times 19 September 2000). A desire to link-up with high-reputation firms may explain part of this movement (cf. Banerjee and Duflo, 2000).

project management in which engineering is just one component.²⁹ US engineering firms dominate in the world market, but Dutch and British firms also have a remarkably strong representation among the world's leading engineering firms. Conversely, German and French firms remain relatively small (cf. Table A3).

3.3 Ownership advantages, location advantages and internalisation advantages in BS industry

The analytical framework developed in chapter 2 uses the concepts of ownership, location and internationalisation advantages in a very general way. This section identifies what ownership, location and internationalisation advantages mean in the BS industry. The inventory below builds on existing literature.³⁰

3.3.1 Ownership advantages

- The core competitive advantage for knowledge-intensive BS firms is their access to information and technology, i.e. their ability to acquire, assemble, produce, store, monitor, interpret and analyse data. Many of such competences are embodied as tacit employee knowledge.
- Several BS branches produce client-specific, complex products with a strong human capital content. Their quality probably is more variable than that of manufacturing goods. The ability to control product quality is crucial in the competition process of many BS branches, because product quality affects a core asset like the business reputation.³¹
- BS firms derive economies of scope from working for different clients in different industries; it forms an asset for providing services in the future.
- Compared to purely domestic competitors, international firms derive a market advantage from their ability to move people, resources, product concepts, information and specialised skills between different parts of the organisation or across national borders.
- BS firms can reap economies of scale associated with the production and marketing of know-how for technology-intensive products.
- Large firms, because of their size and reputation, may have access to better-quality inputs than their competitors. For example, their recruitment scouts may succeed more easily in attracting the most brilliant students from universities. This advantage helps them sustain or advance their competitive position.

²⁹ Cf. Ministerie van Economische Zaken and Knight Wendling (2000, pp. 92-156); Swedish Federation of Architects and Consulting Engineers (1999).

³⁰ Dunning (1989); Dunning and Norman (1987); Aharoni (1993); Baghi-Sen and Sen (1997); Roberts (1999).

³¹ On the importance of reputation effects, cf. Banerjee and Duflo (2000).

3.3.2 Location advantages

- A major location advantage for producing business services abroad is simultaneity of production and consumption, which is still required for many types of business services. For instance, industrial cleaning or security services require local presence.
- Cross-border transaction costs can be too high to allow much international trade, even though the BS products can in principle be delivered through exports.³²
- Large, multinational client companies may insist on having a local supply of identical BS products in countries where they have subsidiaries.³³ Hence, to keep such clients, having a local representation gives a location advantage.
- The necessity of face-to-face contact with clients may form a reason for having a local representation.
- To gain early access to information resources, and to take advantage of agglomerative economies in foreign countries, some BS firms may need representations or listening posts in international financial cities.³⁴ This holds, for example, for legal and management consultancy firms.
- Adapting the BS product to local taste and culture is done easier by a local subsidiary than by exports.
- Complying with local market-entry regulation or other government regulations requires having a local production unit in some countries. Restrictions on the use of foreign barristers, for instance, create a location advantage for local lawyer firms.
- Preventing a first-mover market advantages of competitors, i.e. preventing them from getting a decisive local market advantage, can induce oligopolist firms to set up a local establishment.

3.3.3 Internalisation advantages

- Internalisation diminishes the strategic vulnerability of losing a volatile core asset. This occurs when ownership advantages are idiosyncratic, non-codifiable or only partly codifiable, and when they comprise the core assets of BS firms (e.g. quality and reputation). A good reputation is an accumulated intangible asset but it can be demolished in a short time by an underperforming licensee. For the same reason, confidential information on large international clients is often held closely rather than supplied to an arm's length party like a licensee.

³² ICT innovations tend to lower this type of transaction costs.

³³ This factor explains an important part of the early geographical spread of accountancy and advertising firms. Such demand-following foreign expansion is also found in engineering, management consultancy, security, legal and tax consultancy.

³⁴ Braconier *et al.* (2000) found no evidence - for Swedish manufacturing FDI - that this 'listening post' mechanism is really important for technology spillovers. However, as a way of gathering general market information and for being represented in relevant networks, local representations in some financial and business centres may be essential.

- Transaction costs in case of licensing form the most obvious reason for foreign direct investment in a local production unit (costs for searching, negotiating, monitoring, enforcing, litigation).
- Government regulations may require some professional services (e.g. legal or accountancy firms) to have a national office to operate from.
- Local pilot subsidiaries may co-operate in joint ventures with local firms in order to acquire local experience and market knowledge. The resulting knowledge can be used to set up a more integrated local subsidiary.

The importance of locational and internalisation factors in BS branches is illustrated by the results of a small survey in the UK. 65 Firms were asked which factors affected their decision to set up a local office in the UK (Table 3.2). Apart from market opportunities, all firms stressed the importance of personal presence for their business transactions. Note that the results under *Competitors opening local operation* suggest that a 'follow-the-leader' oligopolist investment pattern is important in engineering consultancy.

Table 3.2 Factors influencing the decision of BS firms to operate directly in the UK, mid-1980s

	Engineering consultancy	Management and related BS ^{a)}	Computer and information technology
	percentage of respondents		
For firms without previous links with the UK^{c)}			
* Existence of a large potential market	66	100	100
* Need for local presence: face-to-face contact with affiliates or customers, need to be close to the market, prestige	100	100	100
* Cost of exporting: travel costs, information loss, inconvenience	50	21	-
* Competitors who have or are about to have local operations	66	43	12
* Difficulty in writing effective and enforceable contract with licensee	25	29 ^{b)}	25
* Difficulty in controlling product quality of licensee	25	36 ^{b)}	25
* Fear of underperformance by licensee	12	36 ^{b)}	12
* Need to capture benefits of integrating UK activities with other parts of the corporation	25	43	25
For firms with some previous links with the UK^{d)}			
* Market growth	100	100	100
* Increased cost of exporting: travel cost or travel frequency	-	25	12
* Increased need for personal presence, company image	100	100	100
* Competitors opening local operation	75	25	37
* Disappointment with performance of licensee	-	-	25

Notes: a) Industries amalgamated because of small sample size. b) Related business services only. c) The number of respondents for the three industries is 12, 14 and 8, respectively. d) The number of respondents for the three industries is 4, 4 and 8, respectively. Source: Dunning and Norman (1987).

4 Internationalisation through trade in BS products

This chapter tests the trade predictions derived from the Dunning-Markusen theory. Before doing that, section 4.1 briefly reviews data on the role of international trade for the business services industry. The empirical test of the theoretical trade prediction can be found in section 4.2. The final section presents some conclusions. In this chapter, international BS trade is measured as the sum of the following balance-of-payment items: Miscellaneous business, professional and technical services, Computer and information and Operational leasing services. These data are available for most of the relevant countries.³⁵

4.1 General aspects of international trade in business services

This section presents a number of general features and trends of international trade in business services. Table 4.1 shows the distribution of BS exports by country for the world's leading BS exporters and importers. Five countries account for two-thirds of total exports. The USA has about double the exports of number two, the UK, which is followed closely by three countries that had about equal BS exports (Japan, France and Germany). Dutch and Belgian BS exports rank sixth and seventh, which is remarkable given the relatively small size of their economies. Combined BS exports of all the 15 countries in Table 4.1 together in 1996 represented 13.6 per cent of total world services exports,³⁶ up from 12.7 per cent in 1991. Hence, business services account for a slightly growing share of world services trade.

Most export countries are also the largest BS importers, but the country ranking is different. Japan and Germany are the biggest importers, both having a large trade deficit in business services. Conversely, the UK has relatively small imports, and a large trade surplus in these services. The largest trade surplus is found in the USA. The Dutch trade balance for BS products shows a tiny export surplus.³⁷

Figure 4.1 shows the performance of individual countries in the world market for BS. On the horizontal axis, one finds a country's 1996 share in world BS exports. The vertical axis displays how this export share has fared since 1991, after correction for exchange rate movements. France and Japan are the largest losers in the international market, with their shares falling

³⁵ Some caution is warranted as coverage of these items varies from one country to another. Further issues in relation to trade statistics for business services are discussed in Annex 2.

³⁶ Calculated on the basis of data from OECD SITS database and IMF's IFS database.

³⁷ In 1999 the BS share of Dutch exports and imports had grown to 5.5 and 5.7 per cent, respectively, but still an export surplus remained.

Table 4.1 International trade in business services by 15 leading export countries, 1996

Country	BS exports US\$ bln	BS imports US\$ bln	Net surplus/ deficit BS trade US\$ bln	BS share of the country's exports %	BS share of the country's imports %
USA	35.2	22.0	13.2	4.1	2.3
UK	19.5	8.9	10.6	5.7	2.5
Japan	17.6	26.6	-9.1	3.8	6
France	17.2	13.9	3.4	4.7	4.1
Germany	17.2	22.2	-5.0	2.8	3.8
The Netherlands	10.7	10.4	0.3	4.7	5.2
Belgium/Lux.	9.7	8.0	1.8	5.1	4.4
Canada	7.7	7.2	0.4	3.3	3.4
Italy	7.1	9.3	-2.3	2.2	3.6
Korea	5.9	7.1	-1.2	3.9	4.1
Spain	5.5	6.4	-1.0	3.7	4.5
Switzerland	4.9	3.0	1.8	4.5	3.2
Finland	2.2	2.3	-0.1	4.6	6.1
Sweden	1.8	1.6	0.2	1.8	1.9
Norway	1.7	2.4	-0.7	2.6	4.7
<i>Total 15 country</i>	<i>163.7</i>	<i>151.4</i>	<i>12.3</i>		

Note: The trade items 'Miscellaneous business, professional and technical services', Computer and information services' and 'Operational leasing services'. Main data source: OECD, Services: statistics on international transactions (SITS), June 2000.

between 3 and 5 per cent. The Netherlands and Belgium lost between 1 and 2 per cent. On the gaining side with market share increases of at least 1 per cent, we find newcomer Korea, Italy, Spain, the UK and Canada. USA improved its already strong international market position.

Figure 4.1 World market shares in BS exports: 1996 level and change during period 1991-1996

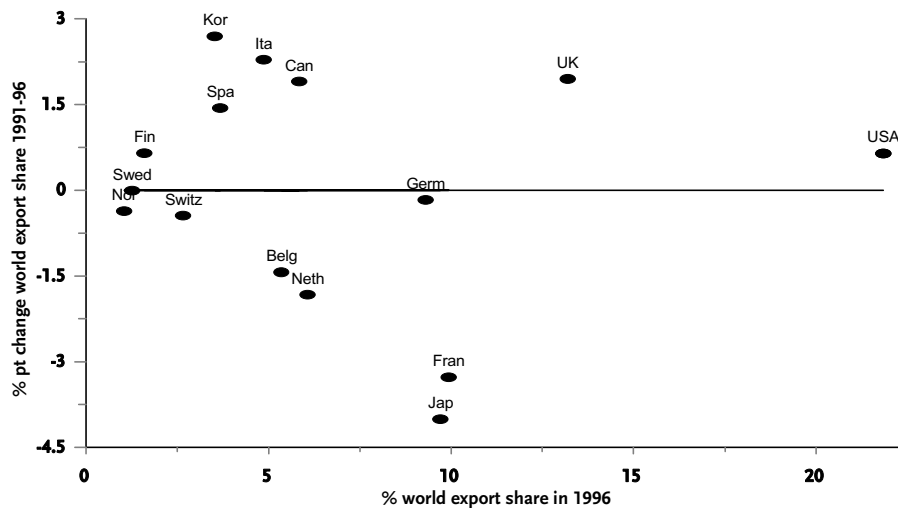
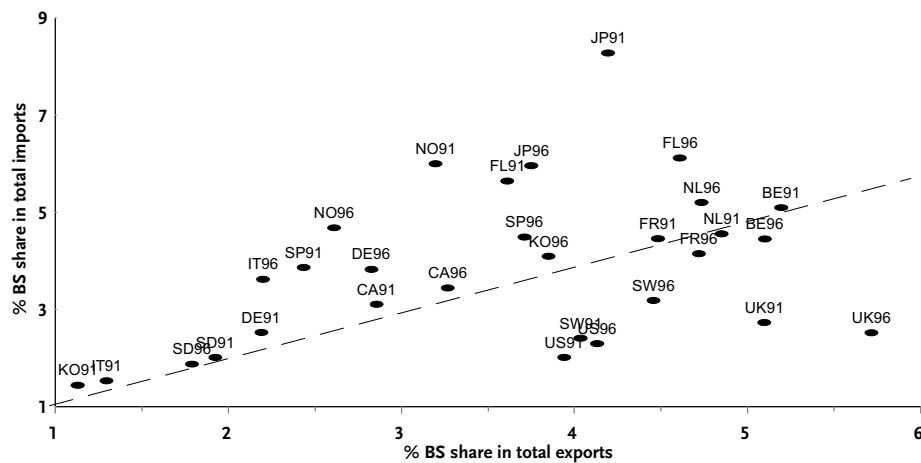


Table 4.2 highlights in more detail how the main components of BS trade contributed to total country exports of the benchmark countries. As can be seen, the largest growth contribution came from *Miscellaneous business, professional and technical services*, at some distance followed by *Computer and information services*.

In most benchmark countries, BS products tend to become more important for the country's total exports and imports as Figure 4.2 indicates for the period 1991-1996. Data points are given for each country's position in 1991 and 1996. In the UK, business services account for a large share of exports, but only for a relatively small part of imports. The Swedish economy is least dependent on internationally traded BS products.

Figure 4.2 Business services as percentage of total country exports and imports, 1991 and 1996



Country legend: SD=Sweden, FR=France, FL=Finland, JP=Japan, NL=Netherlands, DE=Germany, KO=Korea
 NO=Norway, BE=Belgium, IT=Italy, CA=Canada, SP=Spain, US=USA, UK=Great Britain, SW=Switzerland
 Dotted line connects all points with equal share in export and imports. Data source: OECD, SITS database, June 2000.

5

The direction of change in BS trade shares is particularly important for the subject of this report. Most countries move 'northeast', meaning that BS products represent an increasing share of their imports and exports. The opposite happened in the four countries moving 'southwest' (Sweden, Norway, Japan and Belgium), while the Netherlands, UK and France showed diverging movement of the BS import and export share.

Table 4.2 Business services trade items as percentage of total country exports, 1991-99 (or most recent year)

	Neth		USA		Fra		Ger		Belg/Lux.		UK	
	'92	'99	'91	'97	'91	'96	'91	'96	'91	'96	'91	'96
	percentages											
1. Miscellaneous business, professional and technical services	4.4	4.8	3.4	3.9	2.1	4.4	2.1	2.5	4.6	4.6	4.6	4.9
2. Computer and information services	0	0.4	0.4	0.3	0	0.1	0.1	0.3	0.4	0.4	0.1	0.7
3. Operational leasing services	0.4	0.3	0.1	0.2	0	0.2	0	0.1	0.2	0.1	0.2	0.2
Total business services (1+2+3)	4.9	5.5	3.9	4.4	2.1	4.7	2.2	2.8	5.2	5.1	5	5.7
PM:												
Royalties and license fees	0.9	0.9	3.1	3.6	0.5	0.5	0.4	0.6	0.5	0.4	1.1	1.4
All services	22	21.3	28	27.3	26.8	22.9	13.9	14	21.2	19	23.9	23.9

Data source: OECD SITS database.

The share of industry i in a country's external trade flow depends on the share of that industry in the country's GDP, and on the structural trade orientation of industry i . The structural trade orientation factor is the combined result of technical tradeability of industry i 's product, regulation-determined trade barriers, other costs of international trade transactions, and a change in the supply mix (exports versus direct investment) of foreign BS suppliers. We define the structural trade orientation factor (β) for the BS industry as a residual:

$$\beta_{k,t} = \left[\frac{BST_k}{T_k} \right]_t - \left[\frac{BSY}{Y} \right]_t \quad (1)$$

in which:

BST_{kt} : BS foreign trade flow ($k = \text{imports, exports}$) in year t

T_{kt} : BS foreign trade flow ($k = \text{imports, exports}$) in year t

BSY_t : BS production in year t

Y_t : GDP in year t

The change in structural trade orientation factor for the period 1991-96 was calculated for BS exports and BS imports of all benchmark countries.³⁸

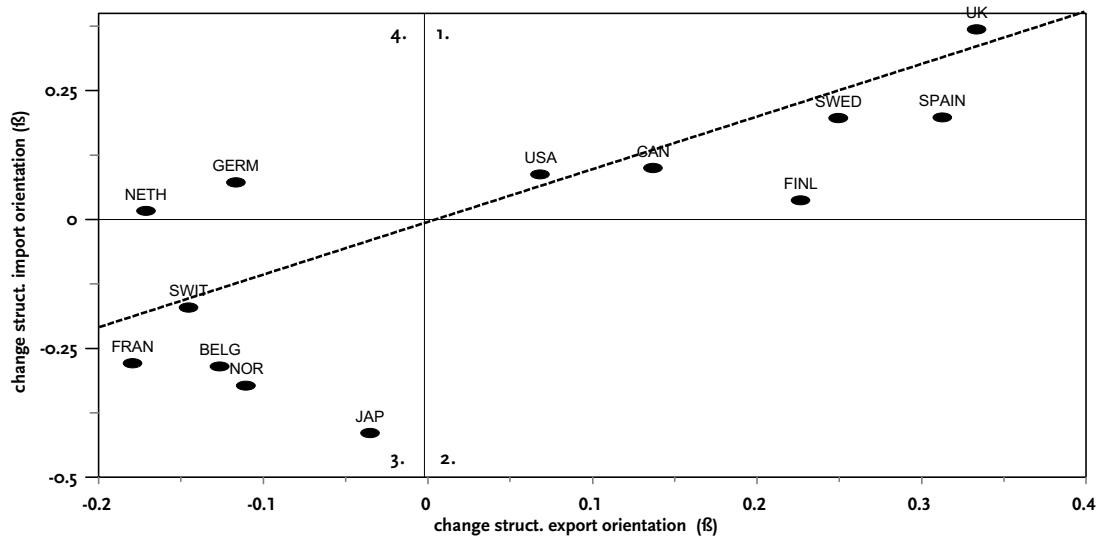
³⁸ The development over time of the structural trade orientation factor follows from equation (1):

$$\Delta\beta_k = \left[\frac{BST_k}{T_k} \right]_o \left\{ \frac{1 + \dot{BST}_k}{1 + \dot{T}_k} - 1 \right\} - \left[\frac{BSY}{Y} \right]_o \left\{ \frac{1 + \dot{BSY}}{1 + \dot{Y}} - 1 \right\}$$

in which a dot over a variable indicates a change perunage between years t and o ($k = \text{imports, exports}$). Country data have been expressed in 1991 exchange rates and prices. BS trade data stem from OECD IDIS database. The exchange rates and the price deflators for exports, imports and GDP have been taken from the IMF International Financial Statistics database. GDP deflators have also been used to deflate BS production values due to lacking industry deflators. If, as is the case in the Netherlands, BS prices increased more than GDP prices, the effect is that the $\Delta\beta_k$ will be slightly overstated in Figure 4.3.

The results are presented in Figure 4.3. Three country groups can be discerned. The group in the first quadrant (including the USA and UK) became structurally more open, both with regards to imports and exports. It means that BS imports and exports grew faster than the share of BS in GDP. The opposite happened in the third quadrant: countries like France, Japan and Belgium became structurally less dependent on imports and exports. The growth of their foreign BS trade was less than that of the BS production share in GDP. Germany and the Netherlands form a third group. The BS market of both countries became structurally more open to BS imports, while export orientedness increased less than the BS share in GDP.

Figure 4.3 Change in structural trade orientation of business services industry, 1991-1996



The dotted line connects points where structural import orientation and structural export orientation changed to the same extent. The changes are in percentage points. Sources: see main text

4.2 Testing the relation between imports and domestic demand in BS industry

In chapter 2 the following trade prediction was derived from the theoretical framework: *Higher growth of domestic BS demand results in a lower share of imports in domestic BS supply.*

Stated otherwise, the change in import share should be correlated negatively with the change in domestic BS demand (cf. text box on p.29).

The following testing procedure is pursued. The hypothesis was tested for a group of 13 countries, covering the period 1991-1996. Domestic BS demand is defined as local production plus imports minus exports. Domestic BS supply is defined as domestic production plus

imports. Because more specific price deflators are lacking, trade data were deflated with the national GDP deflator. Data come from OECD data bases (SVAE, SITS) and World Bank.³⁹ The results are that, over the period 1991-1996, a faster-growing domestic demand corresponds with a lower BS share in total imports, and *vice versa*. The correlation is strong, and the coefficient has the expected sign. The result - presented in Figure 4.4 - is fully consistent with the hypothesis, and therefore with the Dunning-Markusen theoretical framework.

The result was investigated a little further. The growth of BS domestic demand can be split into two parts. One part is caused by overall GDP growth. The other part is caused by a changing BS share in GDP; this second effect is labelled structural growth of BS demand. It appeared that, of these two elements, overall GDP growth explained most of the falling import share in domestic BS supply over the period 1991-96. Between structural BS demand growth and the import share of domestic BS supply a weakly positive relation was found.⁴⁰

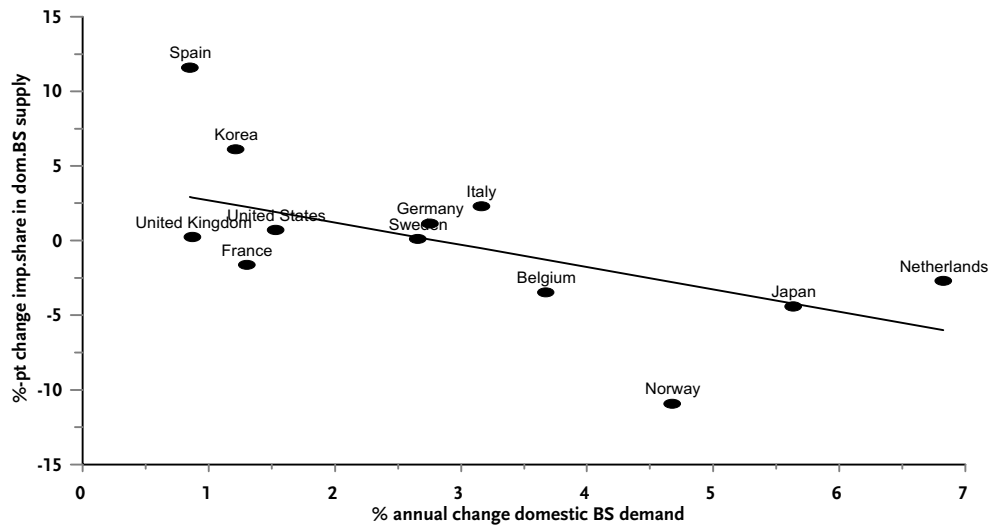
Before jumping to conclusions too easily, it has been checked whether alternative explanations could perhaps explain the BS trade specialisation pattern equally well or even better. Two competing explanations were investigated, first separately and later in a multiple regression context. The first is that BS trade specialisation patterns are determined by 'classic' comparative advantages. The second is related to the tradability status of BS products. If BS products are in majority non-tradables, international trade in these products would only have a supplementary role in the domestic market: BS imports just supplement domestic production, while exports just form a residual market.

The alternative explanations either appeared to be rejected by the empirical test, or they were only weakly (partially) consistent with the empirical data. In order not to bore the reader with rejected hypotheses, the results have been moved to Annex 5 of this report. Nevertheless, these negative findings also yield insight into the backgrounds of BS trade specialisation in the benchmark countries.

³⁹ Value added data have been taken as a proxy for total production, because of a lack of comparable data for the latter variable. Value-added data are from OECD SVAE database, valued in constant prices, and expressed in the 1991 ppp exchange rate against the US dollar. Current data on BS imports come from the OECD SITS data base. They have been price-corrected with national GDP deflators (more appropriate price series were not available) and are expressed in the 1991 PPP exchange rate against the US dollar.

⁴⁰ The structural element of domestic BS demand growth was defined as that part of BS demand growth that cannot be explained from overall economic growth. Between structural domestic BS demand growth and the share of imports in domestic BS supply a weak positive correlation was found, but the result was not statistically significant. This hints at the existence of important inter-country differences in reaction patterns. Detailed results are reported in Annex 5 (Figure A1).

Figure 4.4 Changing import shares in domestic BS supply versus the change in domestic demand for business services, 1991-1996



Regression results: $Y = 4.20 - 1.49 X$
 $R^2 \text{ adj.} = 0.30 \quad n=14 \quad (2.60) \quad (-3.06)$

4.3 Conclusions on foreign trade in BS products

The Dunning-Markusen-Vernon framework predicts that in a fast-growing market where intangible assets are an important aspect of competitiveness, imports by foreign suppliers will increasingly be substituted by local production by subsidiaries of these foreign firms. This prediction has been split into two testable aspects, the first of which is that the change in BS industry's import share is negatively correlated with the change in domestic BS demand. This prediction was confirmed by the empirical data. The next step is to assess whether the increasing share of local production is indeed accounted for by foreign subsidiaries or by national firms. This will be done in chapter 5.

A number of side-conclusions can be drawn from the empirical data on international trade in BS products during the 1990s. These secondary findings are presented below as stylised facts, one series for international BS trade in general, and one series particularly for the Dutch position in international BS trade. The conclusions of this section are partly built on Annex 5.

General aspects of international BS trade:

- World trade in business services represents a growing share of total world services trade.
- OECD countries account for an increasing share of world trade in business services, both as origin and as destination of BS trade flows.

- Five OECD countries supply two-thirds of all BS exports. During the 1990s, the USA strengthened its leading position.
- In most countries, business services represent an increasing share of total country exports and imports. This even happened when the share of total services in country exports stagnated or decreased.
- Import shares of domestic BS supply fall as domestic demand for business services grows stronger.
- The trade orientation of national BS industries partly reflects the increasing share of BS industries in national economies. Substantial differences exist among benchmark countries as to the change in their structural trade openness.
- Trade specialisation patterns in business services can only partly be explained from changes in (revealed) comparative advantage.

Dutch position in international BS trade:

- The Netherlands is strongly presented in the world BS market. Its BS exports rank sixth and its imports rank in the fifth place.
- The Netherlands have a small export surplus in business services trade.
- During the period 1992-99, the BS share in Dutch foreign trade grew, both for exports and for imports. This is remarkable since the share of services in total Dutch trade stagnates.
- BS imports increased faster than the share of BS industry in Dutch GDP. The Dutch BS market appears to be less sheltered from foreign competition than holds for most benchmark countries.
- Dutch BS exports are relatively unaffected by the growth of domestic BS demand, less than in most benchmark countries. This indicates that exports do not form a residual market. However, BS exports increased less than the BS industry's share in Dutch GDP.
- Foreign trade intensity of Dutch BS industry is among the highest of all OECD countries. This level effect may be one of the reasons that, during the 1990s, foreign trade intensity of Dutch BS industry increased less than for the total Dutch economy.

5 Internationalisation of BS firms through foreign direct investment

In an industry where intangible assets are essential in competition, the theoretical framework of chapter 2 predicts that foreign expansion will increasingly take the form of direct investment instead of exports, because intangible assets of a firm can better be exploited by local production facilities abroad, thus avoiding export costs and rent-sharing with local licensees. This prediction was formalised (cf. text box, p.29). This chapter assesses the role of foreign direct investment in the internationalisation of BS industry. The central question is whether direct investment is indeed replacing export supply to foreign BS markets.

The question can be analysed for incoming and outgoing trade flows. The first-best test for the replacement prediction is to assess how the supply share of foreign-owned production increases as domestic demand for BS products increases. As it appears, however, insufficient data are available for a direct test of this relation over time.⁴¹ The few available data for a direct test are summarised in section 5.1. We therefore have recourse to some indirect tests for the prediction. The following three operational hypotheses are subjected to a test:

- I. Over time, foreign direct investment in BS grows faster than BS exports (section 5.2).
- II. Since BS industry is more dependent on intangible assets than the 'average industry',⁴² foreign direct investment will be more important in business services than for the average of all industries (section 5.3).
- III. Branches with standardised BS products depend less on intangible assets than BS branches with knowledge-intensive and client-specific products (Kox 2000). As a consequence, foreign direct investment are expected to be less important for BS branches with standardised products than for other BS industries (section 5.4).

The penultimate section (5.5) deals with the development of intra-company trade in business services. A summary of all findings completes this chapter. Foreign direct investment will be abbreviated as FDI in this chapter.

5.1 Direct testing of the replacement hypothesis

A test for the prediction that FDI increasingly replaces exports to foreign BS markets preferably uses data on the supply share of foreign-owned production. Few direct data are available on the relative size of BS production in foreign affiliates. The FATS database provides information on the weight of foreign affiliates vis-à-vis the home country industry. Unfortunately, this database is still in development and data only refer to a few years (OECD 1999a; 2000d). Data do not even cover all countries in our benchmark group. Table 5.1 shows that the role of foreign subsidiaries in services is still lower than in manufacturing industry. With exception of Finland

⁴¹ Data problems are discussed more extensively in Annex 3.

⁴² See footnote 15 for data on the different weight of immaterial investments in Dutch industries.

and Norway, this holds for all countries on which data are available. The same also holds for national BS branches on which data are available. The table shows considerable differences between BS branches and countries, as to the role of foreign multinationals. The services industries of Japan and Germany are relatively closed to foreign multinationals, while the UK is open to foreign FDI. Another noteworthy fact is that foreign firms tend to be more important in the services industry of smaller countries.

Table 5.1 Turnover of foreign-owned affiliates as a percentage of total turnover of industry in the host country: selected industries, 1995/1996

Country	Year	Software	Other computer and related services	Renting services	Legal services and accountancy	Advertising	R&D	Other business activities	All services	PM: manufacturing
percentage of total turnover of domestic industry										
Finland	1995	35.6	14.2	22.2 ^{a)}	3	9.4	22.2 ^{a)}	7.7	11.5	10.1
France	1996	14.1	9.8	11.2	19.7	7.3	3.8	7.3	9.1	20.2
Germany	1995	..	..	..	..	..	..	..	6.5	12.7
Japan	1995	..	..	..	..	..	..	..	0.7	2.8
The Neth.	1996	..	..	..	..	..	..	..	15.4	29.7
Norway	1995	..	11.4	5.5	..	..	..	5.2	20.1	14
Sweden	1996	..	..	..	..	..	..	..	17.8	20.8
UK	1995	..	17.5	..	..	..	10	13.8	16.5	30.4
USA	1992	8.8	7	17.6	2	11.9	11.3	6.9	9.2	14.5

Notes: a) Renting and R&D. Data source: OECD FATS database (October 1999); OECD (1999c).

FATS data also give information on the weight of national affiliates abroad vis-à-vis the home country industry from which this internationalisation process has taken place. Table 9 summarises the available data. Here a similar picture emerges as in Table 8. Global expansion through FDI in the services industry as a whole is still below the scale that is normal in manufacturing industry. Again it appears that the relative weight of foreign subsidiaries is highest in small countries (Finland, Sweden).

Table 5.2 Turnover national affiliates abroad as a percentage of total turnover and employment in home country industry: services and manufacturing, 1995/1996

	Year	All services		PM: manufacturing	
		share in turnover	share in employment	share in turnover	share in employment
percentages					
Finland	1995	13.7	3.2	36.6	29.8
France	1996	7.1	..	19.2	..
Germany	1995	7.1	4.3	14.8	18.2
Japan	1995	7	1.7	8.5	13
Sweden	1996	..	10	..	70.7
USA	1992	6.7	2.7	28.9	18.3

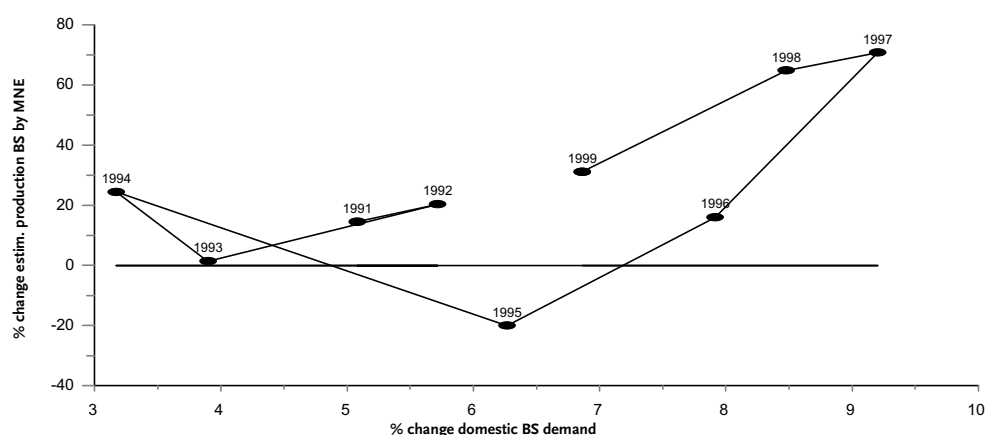
Data source: OECD FATS database (October 1999); OECD (1999c).

Given the lack of relevant primary data on local production by foreign BS subsidiaries, a rough estimate for the Netherlands was made on the basis of FDI data and capital-output parameters of the Dutch BS industry. A number of supplementary assumptions had to be made for the estimation procedure.⁴³ According to the theoretical framework (cf. text box, p.29), we should find a positive relation between the change in size of the domestic BS market and the change in local BS production by foreign multinationals. Inspecting Figure 5.1 learns that indeed such a positive correlation existed for the period 1991-99.⁴⁴ The development over time also displays cyclical aspects. The regression results can be taken as a confirmation of the theory. However, given the underlying assumptions of the production estimates, and also because similar estimates could not be made for other countries (lacking data), the next three sections describe supplementary indirect tests for the replacement prediction.

⁴³ When we estimate domestic BS production by foreign firms on the basis of domestic capital-output parameters and FDI data, some supplementary assumptions are required. The first is that the incremental capital-output ratio for domestic BS industry as a whole also holds (grosso modo) for foreign subsidiaries. For Dutch BS industry as a whole, the incremental capital output ratio (ICOR) over the period 1995-99, calculated as annual investment (incl. immaterial investment items) over valued added, was reasonably stable with a variation coefficient of 0.041. The period average of the ICOR was 13.3. The second assumption is that the incremental capital-output ratio (ICOR) of foreign subsidiaries is stable over time. This assumption can be defended as an average over the total life cycle of a foreign subsidiary. It is imaginable that the ICOR in the start-up phase of foreign subsidiaries is highest, then more or less stabilizes, while it decreases (due to disinvestment and dismantling) in the last phase of the foreign subsidiary's life cycle. The third assumption is that the relation between FDI flows from the home country, and the annual investment of foreign subsidiaries is more or less constant over time. The latter condition does not hold; the relation between FDI flows and stocks shows wild variations. Takeovers of existing firms could explain part of the volatility. The fluctuation problem was reduced by taking 3-year moving averages of incoming FDI flows.

⁴⁴ The fall in local production by foreign BS multinationals in 1995 could be the effect of a statistical revision in that year.

Figure 5.1 Relation between (estimated) production by foreign BS multinationals and domestic BS demand in the Netherlands, 1991-1999



Regression results: $Y = -28.5 + 8.48 X$
 $R^2_{adj.} = 0.28$ $n=9$ (-1.03) (2.025)

5.2 Does FDI grow faster than exports in BS industry?

The first indirect test for the replacement hypothesis is to check whether FDI flows in BS industry grow faster than BS trade flows. Neither trade data nor FDI data on the business services industry are sufficiently available and reliable. Therefore, we looked at this prediction at a higher level of aggregation, all services industries. A long time period, 1985-1998, has been taken to avoid the disturbing effect of very different starting levels. Incoming FDI flows in services industry are compared with services imports, while outgoing FDI flows are compared with services exports. The total period was split in three sub-periods. Table 5.3 gives the results. Incoming FDI flows in the services industry in most countries and in most sub-periods have

Table 5.3 Growth rate differences between FDI flows and international trade flows in services, 1985-1998

Country	Growth rate difference between incoming FDI flows and import flows			Growth rate difference between outgoing FDI flows and export flows		
	1985-89	1990-94	1995-98 ^a	1985-89	1990-94	1995-98 ^a
	percentage point annualised growth					
The Netherlands	52.2	0.5	33.6	17.9	2.8	29.9
Germany	23.1	-2.7	21.4	81.4	4.2	20.9
France	-12.6	-3.8	39.3	32.4	-11.4	67
UK	40.4	-10.3	60.4	35	8.9	27.2
USA	17	0.7	8.4	27.2	18.6	-2.3
Japan	27.5	3.5	3.3	35.6	-15.7	-3.1

Note: a) For the USA this period covers the period 1995-97, for Germany, France and the UK it covers 1995-96, and for Japan only 1995. Data sources: OECD IDIS (2000), OECD SITS (2000), World Bank (WDI 1999). All trade data and FDI flow data are in current prices and exchanges rates.

grown stronger than services imports.⁴⁵ The same results are found for outgoing flows: FDI outflows of the services industry have grown stronger than services exports. These results strongly confirm the prediction. Both findings suggest that foreign investment is becoming the dominant form of internationalisation in services industry. Hence, the exposure of the domestic services industry to foreign competition is increasingly taking the form of local competition by subsidiaries of multinational companies.

Direct investment is becoming the dominant internationalisation mode for the Dutch services industry, both for the incoming and for the outgoing flows. Besides, it appears that FDI inflows in the Dutch services industry have grown stronger than this industry's FDI outflows (except in the middle period when a business-cycle downturn took place). Dutch services exports in all sub-periods grew stronger than services imports.

If outflow growth surpluses can be taken as an indicator for a leading international competitive position in service industries, the relative US position must have started to erode. Over the period 1985-89, the USA still had strong growth surpluses for outgoing trade and FDI flows in services.⁴⁶ Since then, however, the US FDI outflow growth surplus became negative, while also the services exports growth surplus diminished.

5.3 Direct investment more important for BS than for other industries?

The second indirect test for the replacement hypothesis checks whether the relative importance of FDI for the BS industry is larger than in other industries. In 1995/96 this was not yet the case as Table 5.1 indicated: production of foreign subsidiaries weighs more heavily in manufacturing than in BS industry. This is of course the picture at a given moment in time. When hysteresis effects play a role, the picture need not correspond with the recent time trend in the data.

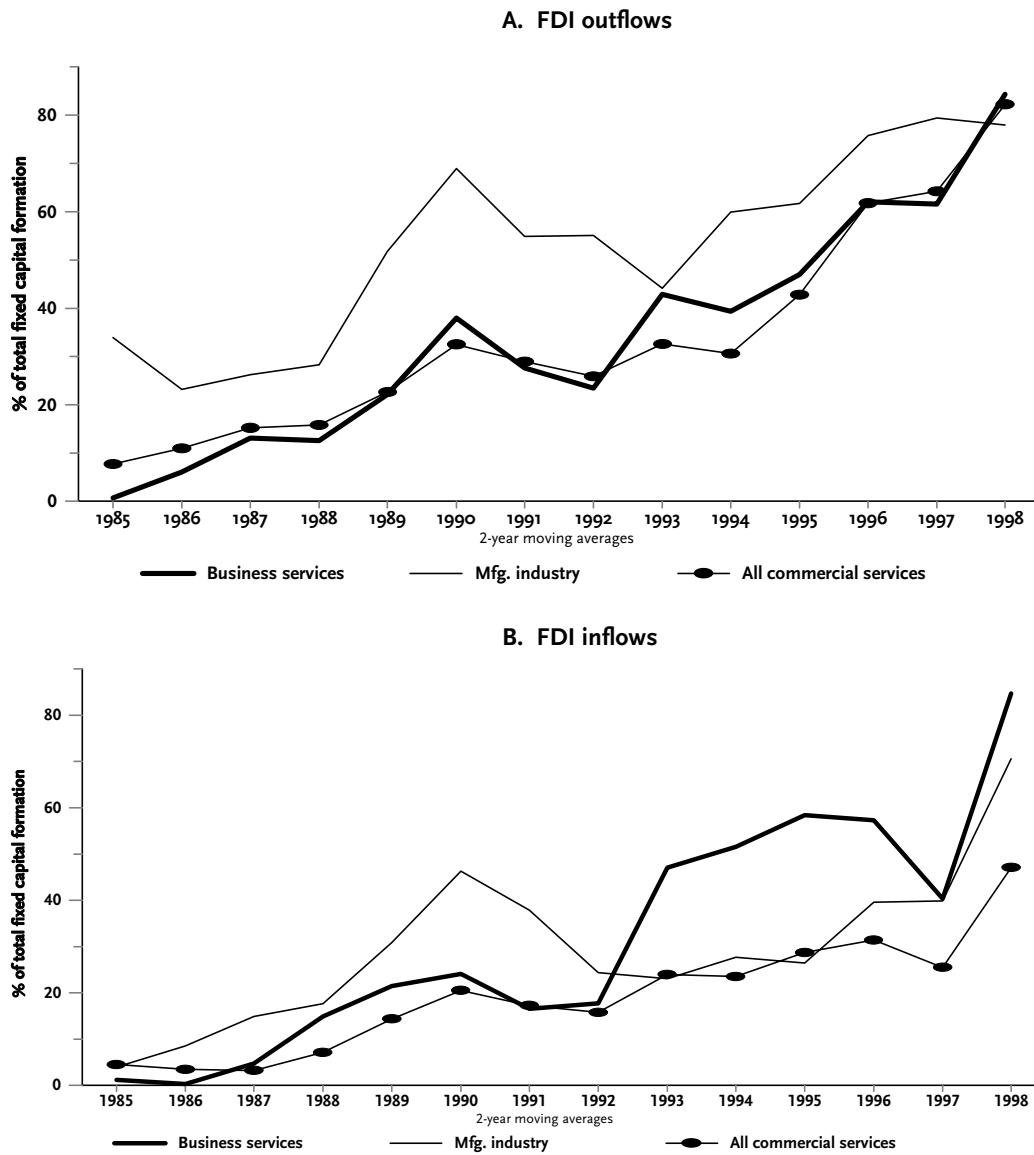
Changes over time almost necessarily are reflected in investment data. We therefore investigated the development of FDI versus domestic fixed capital formation in several industries.⁴⁷

⁴⁵ Note that three out of the four exceptions are found in the sub-period 1990-94, during which most countries experienced a business-cycle downturn. On the outflow side (FDI outflows versus exports), a similar result is found. It suggests that FDI in services (both inflow and outflow) is more subject to business downswings than BS trade. Additional research could establish whether FDI forms an outlet for excess cash flows of BS firms, or whether it is more driven by expected market growth.

⁴⁶ The same pattern is also found when services export levels are compared with FDI stock in services. The ratio of American FDI stocks abroad to American exports of services rose from 0.92 in 1982 to 1.77 in 1996. The ratio of foreign-owned service-industry FDI in the USA to US services imports in the same period rose from 1.16 to 1.92 (OECD 1999b, p. 10).

⁴⁷ To the extent that incoming FDI flows directly result in new fixed investment (rather than ownership shift like in case of a take-over), these flows will also end up in domestic fixed capital formation.

Figure 5.2 FDI outflows as percentage of total fixed capital formation, selected industries, the Netherlands, 1985-1998

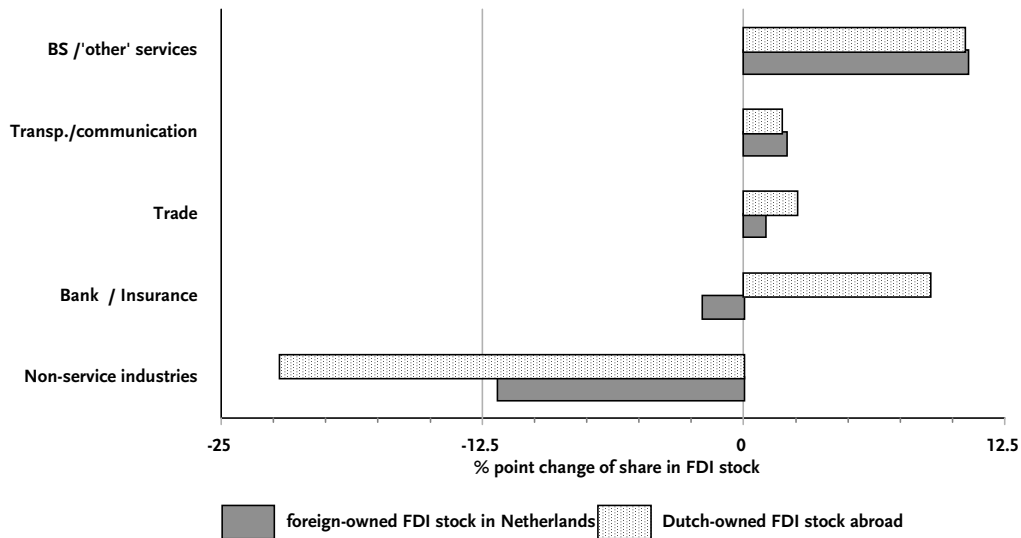


Note: 'Business and other services' are all services other than trade, banking, insurance, transport and communication. FDI data are from De Nederlandsche Bank, Statistical Bulletin. Data on fixed capital formation are from CBS and CPB data series.

If the hypothesis holds, the 'foreign-versus-domestic' investment rate should be or become higher in BS than in manufacturing. This test was used for Dutch data. The results are presented in Figures 5.2. As to FDI outflows, the 'FDI-investment rate' of (business) services increased faster than that of manufacturing. In 1998, outgoing FDI flows represented no less than four-fifths of gross fixed capital formation in the domestic BS industry, about equal to the

level in manufacturing and total services.⁴⁸ In 1985 the rate was still less than one-fourth. For FDI inflows, Figure 5.2 indicates that since 1992 the 'foreign-versus-domestic' investment rate' for BS/Other services increased more than the rate for all services or the rate for manufacturing.⁴⁹ The pattern of 'foreign-versus-domestic' investment rates for the Netherlands in the 1990s corresponds with the pattern we expected.

Figure 5.3 Change in industry composition of FDI stock, the Netherlands 1984-1998



Supplementary evidence to support this finding comes from Dutch data on the industry composition of FDI stocks.⁵⁰ As can be seen in Figure 5.3, most services industries increased their shares in both foreign-owned FDI stocks in the Netherlands, and in Dutch-owned FDI stocks abroad, over the period 1984-98. Even more significant is that, of all industries, business services⁵¹ most increased its share in Dutch FDI stocks. This held for incoming and for

⁴⁸ Dutch FDI data for 'Business and other services' must be interpreted with caution because this category also contains flows associated with real estate, financial lease, and treasury activities of foreign subsidiaries of Dutch-based multinational companies. Clearly, this is an undesirable situation from the perspective of statistical transparency, but DNB so far only gives qualitative clues as to the relative importance of the non-BS components (cf. DNB Statistisch Bulletin, September 2000, p.9-10).

⁴⁹ Even though manufacturing is again receiving considerable FDI inflows in recent years.

⁵⁰ Cf. Annex 3 for the relation between FDI flows and FDI stocks.

⁵¹ For the purpose of Dutch FDI statistics defined as all other services other than trade, banks, insurance, transport, storage and communication. Data on 1998 FDI stocks were kindly provided by De Nederlandsche Bank, department Statistical Information and Reporting.

outstanding stocks.⁵² The share of non-services industries -particularly manufacturing- diminished sharply. The time trends found in this section are consistent with the predicted pattern, even though the turnover share of BS foreign-affiliates was in the mid-1990s still below that in manufacturing industry.

5.4 Different FDI patterns for standardised and client-specific business services?

The third indirect test for the theoretical framework checks whether BS branches with standardised products are less intensive in FDI than BS branches with client-specific and knowledge-intensive products.⁵³ The text box below gives a classification of BS branches according to the degree of standardisation or client-specificity of their products. Not much data are available to test this hypothesis.

Standardised and client-specific business services

STANDARDISED BUSINESS SERVICES

- * industrial cleaning
- * security services
- * notary services
- * standard auditing
- * wage administration
- * temporary work
- * technical testing
- * standard software
- * data processing

CLIENT-SPECIFIC BUSINESS SERVICES

- * economic consultancy
 - * software design
 - * software maintenance
 - * advertising and P.R.
 - * specialist accountancy
 - * legal and tax advise
 - * market research
 - * engineering
-

Table 5.1 provided some indication that national BS branches with standardised products (e.g. Other business activities, Accountancy) had a lower foreign-affiliate turnover share than BS branches with knowledge-intensive and client-specific products. For 1996, French branch data are available on the turnover share of foreign subsidiaries in individual BS branches.⁵⁴ The results are presented in Table 5.4. Branches with knowledge-intensive and client-specific products, like computer-related services, legal services, economic consultancy and market

⁵² Dutch BS firms primarily expanded in the European Union (UK, Belgium). Foreign BS firms that most increased their FDI stock in the Netherlands, were those from the UK, Ireland and Spain. For Dutch BS industry, the EU became between 1984 and 1998 more and more important as a source and as a destination of FDI stock. The opposite held for the USA, although this country in 1998 still accounted for 17-18 per cent of foreign and outstanding FDI stock.

⁵³ Exploitation of intangible assets (eg. reputation) in knowledge-intensive and client-specific BS branches requires local presence, according to our theoretical framework.

⁵⁴ These data in fact reflect cumulative FDI stocks rather than flows.

research, have above-average shares in the BS total. This holds for foreign-owned subsidiaries in France, and for French-owned subsidiaries abroad.⁵⁵

Table 5.4 France: turnover of foreign subsidiaries by BS branch, 1996

BS branch	Foreign-owned firms in France	French-owned firms abroad
	% of turnover of domestic BS industry	
Computer-related services	13	14.8
Bookkeeping, accountancy	0.1	0.1
Legal services, economic consultancy	49.8	61.5
Market research, public relations	5.5	3.9
Architectural services	0	6.5
Engineering services	5.3	0.2
Research and development	1.1	7.1
Temporary work agencies	16.2	0.02
Industrial cleaning	1.9	5.8
Other business services	7.1	0
All business services	100	100
<i>PM: BS as % of all industries</i>	<i>5.7</i>	<i>10.7</i>
<i>PM: Services as % of all industries</i>	<i>43.3</i>	<i>41.6</i>

Data source: OECD FATS database; Belli and Peyroux (1999).

Summarising, the available empirical evidence - although shallow due to data availability - is consistent with the pattern we would expect on the basis of the theoretical framework. Nonetheless, country-specific and idiosyncratic influences appear to have large influence on the branch distribution of BS direct investment stocks.⁵⁶ Moreover, product tradability and transaction costs for exporting (the M-factor in the text box on p.21) may differ by BS branch, resulting in different trade-offs between internationalisation modes. This potentially disturbs inter-branch comparisons of FDI behaviour.

⁵⁵ US branch data in Annex 3 also confirm that branches with knowledge-intensive and client-specific products tend to have relatively high shares in total foreign-owned direct investment stock in the USA. This holds e.g. for computer-related services, R&D services, Advertising and Engineering services. For US FDI-stock abroad, branches with above-average shares include advertising, management and PR services.

⁵⁶ The large inflow of foreign FDI in temporary work agencies - both in the USA and in France - indicates that idiosyncratic factors like restructuring of local labour market institutions can also play important roles. Further details on the branch composition of US direct investment stocks and flows can be found in Annex 3.

5.5 Development of intra-company trade in business services

According to the internationalisation theory of Vernon (section 2.2), leading firms in senescent oligopolies use their network of national subsidiaries for a cost-minimising trade strategy. Vernon predicts that their operations will become more dependent on worldwide sourcing strategies, i.e. using intra-company exports from subsidiaries in low-cost countries to improve their competitive power in higher-cost countries. An increasing share of intra-company trade in international trade in BS products can - if the theory is correct - be taken as an indication that BS trade is becoming dominated by senescent oligopolies. Data from the OECD/Eurostat SITS database allow to investigate this possibility. The results are presented in Table 5.5. On the export side, an increased share of intra-company trade is only found for Italy, France and Sweden. For all other countries, the intra-company share decreased instead. The latter also holds for BS imports in all countries. Hence, for BS as a whole, hardly any empirical indication is found that indicates a growing importance of senescent oligopolies. Rather the contrary is true: foreign-owned BS subsidiaries in host countries depend less and less on intra-company trade.⁵⁷

Table 5.5 Intra-company trade as percentage of trade in 'Miscellaneous business, professional and technical services'

Country	Period	Share in exports			Share in imports		
		first year	last year	change in %-points ^{b)}	first year	last year	change in %-points ^{b)}
Belgium/Lux	1992-96	71.7	60.5	-11.1	66.1	62.2	-3.9
Finland	1992-96	20.1	5.7	-14.4	30	27.9	-2.1
France	1992-96	21.6	22.6	1.1	20	19.2	-0.8
Germany	1991-96	15.5	12.7	-2.8	18.1	17.6	-1.2
Italy	1992-97	31.8	36.7	4.9	38.6	37.3	-1.3
The Netherlands ^{a)}	1992-96	26.9	26.9	0	29.4	29.4	0
Spain	1992-96	17.7	14	-3.7	21.1	19.8	-1.3
Sweden	1992-96	23.3	27.2	3.9	37.4	29.7	-7.6
UK	1989-96	30.8	27.2	-3.6	47.5	29.7	-17.8
USA	1989-97	84.9	72.4	-12.5	88.6	76.5	-12.1

Note: a) data for the Netherlands are unreliable. Since a fixed percentage of intra-company trade is found for all years within the investigated period, apparently this trade flow is estimated rather than measured. b) Shaded areas indicate a positive growth in the share of intra-company trade. Data source: OECD/ Eurostat, SITS database, June 2000.

⁵⁷ In Vernon's theory this pattern could be consistent with the presence of innovation-based or mature oligopoly.

5.6 Conclusions

The empirical data material on foreign direct investments in the business services industry still appears to be quite shallow. This made it impossible to give conclusive evidence on the question whether foreign BS suppliers are increasingly substituting BS imports by local production of their subsidiaries. Nevertheless, indirect tests yielded results that in most cases were consistent with the predicted pattern:

- A positive link was found between the change in estimated production of foreign BS multinationals in the Netherlands and the change in Dutch BS demand (imports plus domestic production).
- For all individual benchmark countries, the growth of incoming FDI flows was compared to the growth of services imports in three sub-periods. It appeared that FDI in almost all cases had grown stronger than imports.
- For Dutch BS industry, FDI inflows since the 1990s accounted for a sharply increasing share of total fixed capital formation. The same held for FDI outflows of Dutch BS industry.
- The share of services industry in incoming and outgoing FDI flows increased in most countries.
- French data showed that local production of foreign subsidiaries were more important in BS branches with client-specific and knowledge-intensive products than in BS branches with standardised products. This is consistent with the greater importance of intangible assets in the case of client-specific and knowledge-intensive BS branches.

Finally, no indications exist as yet that BS branches are characterised by aging oligopolies of the type that Vernon's theory sketches. The share of intra-company trade in BS imports decreased in all benchmark countries.

6 Impact of national regulations on BS markets

Government policies still have considerable influence on international trade in BS products. Local regulations also form important variables for location decisions of BS multinationals. This chapter investigates how regulations and local policies influence internationalisation patterns in BS industry. Section 6.1 reviews the main welfare-economic arguments behind national policies towards BS industry. Differences between the way in which benchmark countries regulate their BS industry are compared in section 6.2. The emphasis is on policies towards the knowledge-intensive, professional BS branches. National regulations may - even if that was not the original intention of policy makers - operate as barriers to imports or direct investment inflows in the BS industry. This is analysed in section 6.3, where also some empirical estimates are given of the welfare costs for the national economy. The last section presents the conclusions.

6.1 Welfare considerations for national BS policies

National regulatory policies towards the BS industries used to be governed by purely national welfare consideration. It is useful to distinguish between the following five welfare effects of international BS trade and FDI inflows in the BS industry:

- (a) net balance of payment contribution;
- (b) contribution to domestic employment, value added creation, and tax basis;
- (c) transfer of technologies, knowledge and quality aspects to domestic firms;
- (d) impact on domestic competition in BS industry, and
- (e) externalities that fall upon the rest of society.

The balance of payment effect and the contributions to employment, value added and domestic taxes are probably the most straightforward welfare effects. The balance of payments contribution includes of the effect on the current account (transborder payments for imports, exports, royalties, management fees, licensing fees, earnings remittances) and the effect on the capital account (direct investment flow).⁵⁸ More local production by foreign multinationals may increase domestic value added, employment and the tax base. It can, however, also 'crowd out' some less efficient domestic producers. Substitution effects also occur when BS imports increase. The potential losers from such substitution effects are employees in the crowded-out (and as a rule less efficient) domestic producers. In a healthy economy, welfare losses due to such reshufflements will only be temporary.⁵⁹

⁵⁸ As a rule, data availability is not sufficient - not even for the Netherlands - to perform a quantitative assessment for of the balance-of-payments effect for individual MNE subsidiaries or FDI projects.

⁵⁹ Skilled BS labourers could lose when their skills are firm-specific for the domestic services firms or when they are immobile due to any other cause.

As to technology transfer, the third welfare effect, Markusen, Rutherford & Tarr (2000) stress that imported knowledge-intensive business services (abbreviated: KIBS) enhance welfare in the importing economy, because they bring substantial benefits of specialised knowledge.⁶⁰ Such knowledge would be costly in terms of both time and money for domestic firms to develop it on their own. They conclude that regulation restraints on foreign providers of professional BS should be liberalised, and that the optimal tax on such FDI would be negative. Imported KIBS would economise on the use of domestic skilled labour compared to domestic firms that so far provided the substitute service. Such efficiency gains enhance domestic welfare, especially because KIBS provide for an intermediate input in the domestic final goods industry. Generalising this case, more BS imports and more activity by foreign BS multinationals is likely to lead to transfer of new technologies, product and quality concepts. Since the BS industry is an intermediary industry, the positive effects of such transfers may easily spread through the entire domestic economy.

The fourth welfare effect is related to the competition-increasing effect of more BS imports or FDI inflows. The direct effect of more BS imports or market entry by a new foreign subsidiary is always that competition in the domestic BS market intensifies. More quality or price competition is welfare-enhancing in the domestic market. The BS industry is strongly dominated by small-scale enterprises and low entry barriers for new domestic firms, while at the same time BS industry in most benchmark countries experiences stagnating productivity growth compared to the rest of the market sector.⁶¹ To the extent that productivity performance and price-quality performance is improved by better exploitation of scale advantages, foreign BS multinationals may well have a positive contribution to this welfare advantage. The flipside of the coin is that entry by large foreign firms can also have competition-limiting effects.

The fifth domestic welfare effect of international BS trade and direct investment relates to externalities that fall upon domestic society as a whole. The reason is that the quality of business services may have social implications that extend wider than only the purchasing and selling companies. Some examples of BS branches whose products have a wider social impact are:

- architecture (reliability, public safety, aesthetical aspects);
- engineering (reliability, public safety, efficiency);
- auditing (financial stability and credibility, protection of small investors); and
- legal services (impact on legitimacy of social framework and institutional stability).

⁶⁰ Fosfuri et al. (2001) analysed such spillover effects through workers' mobility. Cf. Barré (2000); Den Hertog (2000).

⁶¹ cf. Kox (2000).

Such wider effects of BS transactions cannot be captured completely, and therefore tend to be underrated by direct buyers. Policy intervention may be required to safeguard that BS products are supplied in such type and quantity that positive externalities are provided to a socially desirable degree, while negative externalities are suppressed. Imports and the local operation of foreign suppliers of these products therefore tend to be ‘watched’ by domestic policy makers. The welfare considerations that have been mentioned form the basis for government policies and regulation regimes for BS industry. Table 6.1 summarises the most important short-term welfare effects of having more international BS transactions, seen from the perspective of the national economy.⁶²

Table 6.1 National welfare interests related to having more international BS transactions ^{c)}

Type of transaction	Potential national welfare gains ^{b)}	Potential national welfare losses ^{b)}
A. Outgoing FDI flows	Stronger worldwide position domestic BS companies, scale advantages	No effect ^{a)}
B. Incoming FDI flows (new foreign subsidiaries)	More employment, more value added, widened tax base, more foreign technology and positive knowledge spillover effects, more competition in domestic BS markets	Substitution of domestic BS production
C. Incoming FDI flows (take-overs of existing domestic BS companies)	More foreign technology and knowledge spillovers, potential scale advantages	Substitution of domestic BS production, competition effect (depending on market concentration)
D. BS exports	More employment, more value added, widened tax base, contribution to current account, scale advantages	Diffusion of domestic knowledge and quality advantages
E. BS imports	More competition (lower prices), diffusion of foreign knowledge and quality advantages (spillover effects)	Substitution of domestic BS production, also resulting in less employment and a smaller tax base

Note: a) Provided that FDI outflows do not substitute BS exports. b) Only short term effects are mentioned; the longer-term effects depend on many interaction parameters in BS markets, so that generalisations are more difficult. c) General externalities for the rest of society (see main text) are not explicitly mentioned in the table, but may still form a cause of general welfare concern.

The policy margin for national regulations of BS markets is shrinking. Increased openness of national economies, European integration, and country commitments made during WTO services negotiations are three constraining factors for national regulatory policies with regard to

⁶² The welfare effects in the longer term are conditional upon many interactions in the domestic market. Hence, making generalised predictions on the long-term welfare effects is skating on thin ice.

BS markets. OECD periodically reviews country performance with regard the freedom of capital movements and the liberalisation of services trade.⁶³ Hence, international forces push towards harmonisation and liberalisation, or - as it is called in international trade speak - towards a 'level playing field'. The possibilities for vested national interests and branch organisations to leave their mark on domestic policies for the BS market are shrinking.

6.2 Forms of regulation in national BS markets

This section gives an overview of differences in national regulations for BS markets, in particular the markets for professional BS services.⁶⁴ Three main types of regulations can be distinguished: regulations to ensure high standards of human capital inputs into the service, regulations to ensure quality of the BS product itself, and regulations to influence the business

Types of national regulation in business services industries

1. FIXING QUALIFICATIONS TO PRACTICE (INPUT-RELATED)
 - certification requirements for necessary education and experience
 - requirements on membership of national branch organisations
 - definitions of professional titles and protection of their use
 - post-qualification educational requirements

 2. FIXING STANDARDS OF PROFESSIONAL COMPETENCE (OUTPUT-RELATED)
 - ethical standards, codes of conduct
 - technical performance standards
 - requirements for professional indemnity and liability insurance
 - requirements pertaining to organisational structure of BS firm

 3. REGULATIONS AFFECTING COMPETITIVE CONDITIONS
 - prohibitions against business relations with non-professionals
 - restrictions on entry (direct by law or delegated to branch organisations)
 - restrictions on price-setting
 - restrictions on advertising and marketing
-

operation of BS providers. The text box above presents a general overview. Some countries have delegated regulatory powers for BS branches to supervisory boards and/or branch associations.

⁶³ Somewhat outdated, the services trade is labelled 'Invisible Transactions'. The OECD Committee on Capital Movements and Invisible Transactions monitors country compliance with the OECD Codes of Liberalisation (e.g. OECD 2001e).

⁶⁴ Focussing on architects, engineers, accountancy, lawyers, notary services, and tax consultancy.

Many knowledge-intensive business services fall in the category of 'credence goods', meaning that even after buying a purchasing agent may not be able to judge their quality adequately. Several types of government regulation intend to protect buyers against deficient quality or deceptive over-supply of these services. The market-based correction mechanism against such practices is a reputation premium: high-quality providers of this service earn a price premium. However, because some governments think that many buyers are unable to discern real quality, given the very knowledge-intensity of these services, they introduce regulations in such BS branches. Government-controlled quality aspects often either concern the human capital inputs into the BS product or the BS product itself.

Apart from quality-oriented regulations, some countries still use regulations that apparently want to ensure professional independence by suppressing market-oriented or commercial behaviour in these professional services branches. Many countries apply restrictions on the corporate form that BS firms in certain branches can have. For example, in some countries a firm of lawyers can only be organised as a partnership and not as a limited-liability company. In many countries, firms of lawyers cannot take on accountants as partners and vice versa. Such restrictions can be an impediment to efficiency, innovation and foreign competition.

WTO and OECD published a range of studies on the state and nature of market regulation in the BS industry. Particular attention in these studies is given to the markets of knowledge-intensive or professional business services.⁶⁵ A series of five tables, Tables 6.2 through 6.6, present more country detail on national regulations for professional business services in benchmark countries. The tables are based on OECD (1996). A recent, comprehensive study by the OECD concluded that the picture which emerged from the 1996 OECD study has changed only a little, and that most OECD countries still regulate the activities of professional BS branches, either directly or by relegating regulatory powers to domestic professional organisations (OECD 2000a, OECD2001b).

Table 6.2 shows that the Netherlands and the three Scandinavian countries appear to have relatively few regulations in place for professional BS branches. France and the UK take intermediate positions, while Belgium, Germany, USA, Italy and Japan have heavily regulated professional BS branches.

⁶⁵ OECD (2000a); WTO Council for Trade in Services (1998a; 1998b; 1998c).

Table 6.2 National regulations concerning key activities of BS providers

	Belg.	Den	Fin.	Fran	Ger	Italy	Japan	Neth.	Swe	UK	USA
Legal services											
* representation before courts	R/S	R	- ^{a)}	R	R/S	R/S	R	R	- ^{a)}	R/S	R/S
* representation before administrative agencies	S	-	- ^{a)}	-	S	S/-	R	-	- ^{a)}	-	S
* advice on matters predominantly regul. by law	-	S	- ^{a)}	S	S	-	R	-	- ^{a)}	-	R/S
* Conveyancing / notary services	R	S	- ^{a)}	R	R	S	R/S	R	- ^{a)}	R	R/S
* patent law	S	S	- ^{a)}	R	R/S	S	R/S	-	- ^{a)}	S	R/S
Accounting services											
* statutory audit	R	R/S	R/S	R	R/S	S	R	R/S	R/S	R	R
* public sector audit	R	S	-	R	R	S	X	R/S	-	S	R
* audit of mergers and contribution in kind	R	-	R/S	R/S	R/S	-	R	R/S	R/S	R	R
* accounting	R	-	-	R	-	-	-	-	-	-	-
* insolvency practice	-	-	-	X	S	-	S	X	X	R	S
Engineering services											
* Design and planning	-	-	-	-	-	S	R/S	-	-	X	R
* Representation for obtaining permits	X	-	-	-	-	-	R	-	-	-	R
* Testing and certification	-	-	-	-	-	S	R/S	-	-	-	R
* Feasibility studies	-	-	-	-	-	-/S	-	-	-	S	S
Architects											
* Elaboration of blueprints ^{c)}	R	-	-	-	-	S ^{b)}	R	-	-	-	R
* Request for construction permit ^{c)}	-	-	-	R	R	R/-	S	-	-	-	S
* Monitoring of construction	R	-	-	S	-	S ^{b)}	R	-	-	-	R
* Technical control and certification ^{c)}	-	-	-	X	X	S ^{b)}	R	-	-	S	R
* Topographical determination	X	-	-	X	X	S ^{b)}	S	X	-	X	S

LEGEND:

- Free activity, .i.e. non-regulated. R: Activity regulated and reserved to one type of practitioner
- R/S: Activity regulated and shared between practitioners within a profession. X: Activity not exercised by the profession
- S: Activity regulated and shared between professionals from different professions

Notes: a) Only the professional title is regulated; services are not regulated and can also be provided by a layman. b) For small civil constructions, competences are shared with surveyors. c) It should be noted that apart from the regulation items mentioned per country, most countries have a host of specific regulations for buildings that have to be complied with. Gaining information about these rules creates additional costs for foreign suppliers. Source: OECD (1996).

Table 6.3 reports on measures that suppress commercial, market-oriented behaviour in professional BS branches. Remarkably, the USA (together with Finland, Netherlands and the UK) has most liberalised the commercial operation of these BS branches. Sweden and Denmark take intermediate positions, while the other European countries and Japan still apply heavy regulations as to the company form, fee-setting, advertising, and the operating in professional associations. It can also be seen in Table 6.3 that the legal and accountancy professions still attract the most severe operational restrictions. Some countries delegated part of the regulatory power to professional organisations or branch associations of which membership is obligatory.

Table 6.3 National regulations regarding incorporation, intra-professional associations, fee-setting and advertising

	Belg.	Den	Fin	Fran	Ger	Italy	Jap.	Neth	Swe	UK	USA
Legal services											
* Form of establishment	-	L	-	L	N	L	N		N	-	L
* Fee setting	R	-	-	-	R	R	R		-	-	-
* Marketing and advertising	P	P	-	P	P	P	P	-	-		-
Accounting services											
* Form of establishment	L	L	-	L	L	L	L	L	L	-	-
* Intra-professional associations	X	X ^{a)}	-	X		- ^{b)}	X	X ^{a)}	X		
* Fee setting	-	R	-	R	R	R	-	-	-	R	-
* Marketing and advertising	P	-	-	P	P	P ^{a)}	P	P	-	P	-
Engineering services											
* Form of establishment	-	-	-	-	-	L	-	-	-	-	L
* Fee setting	-	-	-	-	R	R	R	-	-	-	-
* Marketing and advertising	-	-	-	-	P	P	-	-	-		-
Architects											
* Form of establishment	-	-	-	L	-	L	-	-	-	-	L
* Fee setting	R	-	-	-	R	R	R	-	-	-	-
* Marketing and advertising	P	-	-	-	-	P	-	-	-		-

LEGEND: R : Minimum or maximum levels imposed for all/some services provided by professionals. X :Restrictions imposed on multi disciplinary practices (i.e. interprofessionalism). P :Prohibited for some/all services provided by professionals. N : No incorporation allowed. - : No restrictions. L: Only certain forms of incorporation are allowed

Notes: a) Subject to permission. b) Professional accountants and bookkeepers; no prohibition is imposed on other operators.

Source: OECD (1996).

Table 6.4 Mandatory membership in professional organisations / associations

Main professionals in:	Belg	Den	Finl.	Fran	Ger	Italy	Jap.	Neth	Swe	UK	USA
Legal services											
* Lawyers ^{a)}		Y	Y	Y	Y	Y	Y	Y	Y	Y	F
* Notaries		-	-	-	Y	Y	Y	-	Y	-	-
* Patent lawyers		-	-	-	-	Y	Y	-	-	-	F
* Foreign legal consultants		-	-	-	-	Y	-	Y	-	-	F
Accounting services											
* Accountants ^{b)}		Y	F	F	Y	Y	-	Y	Y	F	F
* Auditors		-	F	-	Y	Y	Y	-	-	Y	-
* Tax advisors		-	-	-	-	Y	F	Y	F	-	F
Consulting engineers											
		F	F	F	F	Y	F	F	F	Y	F
Architects											
		Y	F	F	Y	Y	Y	F	F	Y	F

LEGEND: Y: Membership compulsory F: No membership required

Notes: a) The term 'lawyer' covers the widest possible functions, such as Attorney at Law, Avocat, Rechtsanwalt as well as Barrister/Sollicitor.

b) Covers certified and chartered accountants as well as auditors, if these functions are provided together. Source: OECD (1996).

Table 6.4 reports on the presence of compulsory membership of such branch organisations. The USA is the only country that leaves professional BS suppliers free to engage in such organisations. All other countries at least require lawyers to be member of a professional organisation, but often also accountants, engineers and architects. Germany is the most restrictive country, followed by Italy, France and Japan.

Table 6.5 National regulations affecting international transactions by foreign firms

	Belg	Den	Finl.	Fran	Ger	Italy	Jap.	Neth	Swe	UK	USA
Legal services											
* local presence required	R	-	R	-	R		R		R	-	X/-
* restrictions on FDI / foreign ownership		R	R	R	R		R		R	-	-
* minimum number of local directors / staff		R	R	R	-		-		R	-	-
* partnership / association / joint venture	-	R	R	R	-		R	R	R	R/-	-
* restrictions on hiring local professionals		-	-	R	-		R		-	R	-
Accounting services											
* local presence required a)	-	R	R	-	R	R	R	-	R	-	X/-
* restrictions on FDI / foreign ownership	R	R	R	R	R	R	R	R	R		R
* minimum number of local directors / staff		R	R	R	R	-	R	R	R	-	R
* restrictions on hiring local professionals		-	-	-	-		..	-	-	-	-
Engineering services											
* local presence required	-	-	R	-	-	R	R	-	-	X/-	-
* restrictions on FDI / foreign ownership	-	-	R	-	R/-		-	-	R		R
* minimum number of local directors / staff	-	R	R	-	R/-		R	-	R		R
* partnership / association / joint venture	-	-	-		-		-	-	-		-
* restrictions on hiring local professionals	-	-	R		-		R	-	R		-
Architects											
* local presence required	R	-	R	-	-	R	R	-	-		X/-
* restrictions on FDI / foreign ownership	-	-	R	R	-		-	-	R		R
* minimum number of local directors / staff	-	R	R	R	-		R	-	R		R
* partnership / association / joint venture	-	-	R	R	-		-	-	R	-	
* restrictions on hiring local professionals	-	-	-	-	-		-	-	-		-

LEGEND: - : No restrictions exist R: Restrictions applicable X: not applicable

Notes: a) establishment of firms and residency of individuals required in order to provide a service. Source: OECD (1996).

Finally, tables 6.5 and 6.6 report on national regulations regarding BS supply by foreign firms or individual professionals from abroad. Both tables reveal that the Netherlands and the UK impose the least restrictions on the supply of professional BS products by foreign firms or professionals. Belgium applies relatively liberal restrictions of foreign BS supply. The Scandinavian countries and Japan impose relatively tough restrictions on the operation of foreign BS firms. Many countries require a local business presence for professional services firms, thus stimulating BS direct investment rather than BS imports. As Table 6.5 shows, individual suppliers of legal, accountancy or architectural services often need to do local

qualification tests, implying that job qualifications in the home country are not acknowledged in other countries.

Table 6.6 National regulations affecting international transactions by foreign natural persons

	Belg	Den	Fin	Fran	Ger	Italy	Jap.	Neth	Swe	UK	USA
Legal services											
* nationality requirements	R	-	R	-	-	R	-	-	R	-	-
* prior residence requirements	-	-	..	-	-	-	-	-	..	R	R
* requalification requirements ^{a)}	R	R	..	R	R	..	R	-	..	R	R
Accounting services											
* nationality requirements	-	-	R	-	-	R	-	-	-	-	-
* prior residence requirements	-	R	R	-	-	R	-	-	R	-	R/-
* requalification requirements ^{a)}	R	R	R	R	R	R/-	R	R	R	R	R
Engineering services											
* nationality requirements	-	-	-	-	-	-	-	-	-	-	-
* prior residence requirements	-	-	-	-	-	R	-	-	-	-	-
* requalification requirements ^{a)}	-	-	-	-	R	-	R	-	-	-	R
Architects											
* nationality requirements	-	-	-	-	-	-	-	-	-	-	-
* prior residence requirements	-	-	-	-	-	R	-	-	-	-	R/-
* requalification requirements ^{a)}	R	-	-	R	R	-	R	R	-	R	R

LEGEND: R: Restriction(s) applicable -: No restrictions exist.

Notes a) Full or partial requalification requirement. Source: OECD (1996).

The impact of restrictive regulations in large countries are more pervasive for competitive relations within a particular branch than when the same regulations are implemented by a small country. National regulations of large countries and country blocs like the USA and the European Union easily have transborder effects. The box on next page presents a recent illustration of the possible impact of national regulations, derived from the accountancy branch.⁶⁶ Because the strongest multinational companies in the accountancy branch are US companies, changes in US accountancy regulations affect competitive relations in other countries, even beyond the accountancy industry.

⁶⁶ Sources: reports in Financial Times, Financieele Dagblad and The Economist (August and September 2000).

The 2000 US regulation offensive with regard to accountancy firms

The top five international accountancy firms -all of US origin - in recent years diversified into several new and fast-growing activities, like economic consultancy, tax advise, e-commerce advise, legal services, and administrative software consultancy. The growth of consulting 'side activities' was such that the latter contributed to more than 50 per cent of turnover in most large accountancy firms. In 1999, auditing fees represented only 30 per cent of the combined US fee income of the Big Five accountancy firms. Some of these firms exploited trustee services and other financial services in tax havens.

Possible conflicts of interests between the independent auditing function and other activities had become an increasing concern for the US Securities and Exchange Commission (SEC). From its explicit mandate to protect the small investor, the SEC felt increasingly uneasy about the quality of numbers on which Americans are basing their investment decisions. In its aim of upholding the independence of auditors, the SEC has chosen for a confrontational strategy. During 2000, it brought under scrutiny several diversification activities of accountancy firms. The SEC is also trying to reform global accounting standards in the same direction. The moves by the US regulating authorities are closely watched and maybe followed by regulating authorities in other countries.

US accountancy firms anticipated the new regulations by splitting off or selling several of their large diversification activities. Ernst & Young sold its consulting arm for \$ 12.4 bln to Cap Gemini. PriceWaterhouseCoopers is selling its consulting arm for approx. \$17 bln to Hewlett Packard. Cisco Systems, a leading Internet equipment provider, bought a \$1 bln stake in KPMG's consulting business. The rest of KPMG's consulting arm is up for sales. Arthur Anderson's consulting branch has been split-off as an independent firm (Andersen Consulting). Both KPMG and Ernst & Young in 2000 also sold their trust and fiscal services in tax havens like the Channel Islands.

The general picture as to regulation levels of professional services in the benchmark countries is that these branches still are subject to several forms of policy intervention. Most affected are the legal services and accountancy branches. The Netherlands is among the countries with the most liberal regulation regimes, particularly for foreign BS suppliers. This could explain part of the attractiveness of the Netherlands for foreign BS suppliers, both for imports and for FDI inflows. Germany, France, the USA, Italy and Belgium have strong regulations in place for parts of professional BS branches. The UK and Scandinavian countries are relative liberalised.

6.3 Trade-inhibiting policies and their welfare costs

This section deals with the trade-inhibiting and FDI-inhibiting effects of national regulations for BS markets. We distinguish between trade barriers and barriers for direct investment flows.

National regulations are not necessarily barriers to foreign competition, if they equally apply to national and foreign service providers. Regulations become barriers to foreign trade when they –explicitly or implicitly– discriminate against foreign service providers, even if that has not been

the original intention of the policy maker. Professional regulation may have the direct or indirect effect of restricting competition in the market for professional services, raise the price, and/or limit variety and innovation the domestic branch.

For detection of trade-inhibiting and FDI-inhibiting regulations, it is useful to make a distinction between restrictions on entry and on ongoing operations. Entry restrictions affect the ability of a BS provider to establish a physical outlet in a country and supply services through this outlet. Restrictions on ongoing operations affect the operations of the BS supplier after it has entered a national market. Both types of restrictions can be applied non-discriminatory and discriminatory. The typology is illustrated in Table 6.7 for trade restrictions on banking services, derived from McGuire (2000). In practice, foreign BS suppliers often incur additional information and compliance costs due to national regulations.⁶⁷

Table 6.7 Classifying trade restrictions (example of banking services)		
	Restrictions on establishment ^{a)}	Restrictions on ongoing operations ^{b)}
Non-discriminatory	Restriction on number of banking licenses	Restrictions on manner in which banks can raise funds
Discriminatory	Restrictions on number of foreign banking licenses	Specific restrictions on manner in which foreign banks can raise funds

Note: a) Affect GATS supply mode C, i.e foreign direct investment. b) affecting GATS supply modes A,B or D. For GATS supply mode classification, see general introduction (Chapter 1) of this report. Source: McGuire (2000, p. 4).

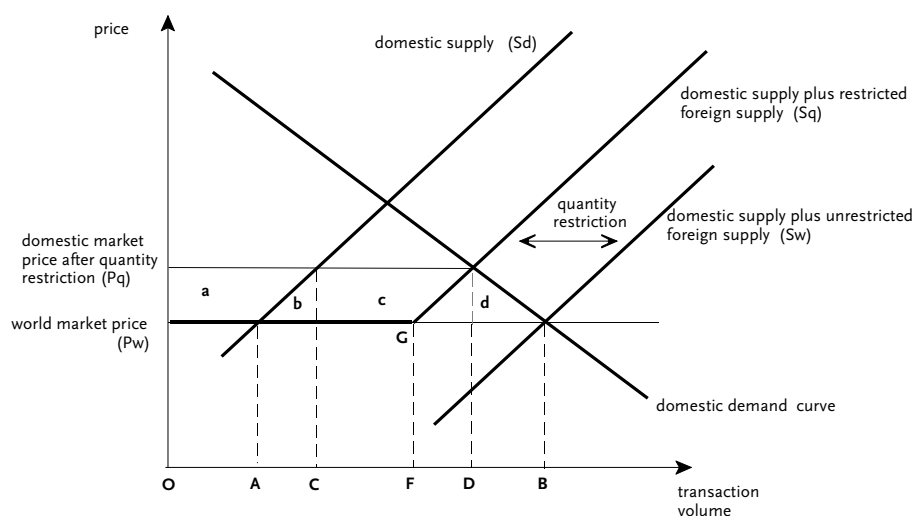
Trade-restricting BS regulations have negative welfare effects.⁶⁸ The standard effect of non-tariffary trade barriers is that it raises domestic cost and price levels, even more than overt import tariffs would do (Anderson 1988). Figure 6.1 describes welfare effects of national regulations that artificially restrict the foreign supply of a particular service. The analysis holds for a homogeneous service product and a small open economy.

Without the restriction, total domestic supply would consist of supply by domestic producers plus foreign supply, indicated by curve S_w . The regulations result in a shift to the left of the curve

⁶⁷ At a general level, the existence of different national regulations forms a (sunk cost) item for setting up local subsidiaries. Potential foreign investors have to learn and compare the different national regulations. Such information costs add up to the total costs of setting up foreign subsidiaries (the Z element in the Hirsch model, text box p.21).

⁶⁸ These negative welfare effects have to be traded off against possible positive welfare effects (e.g. quality guarantees).

Figure 6.1 Economic effects of regulation measures that restrict foreign supply of a particular service (in a small open economy)



that represents total domestic supply.⁶⁹ Supply by national producers expands from OF to OD and demand contracts from OB to OD . The artificial scarcity created by the regulations generates rent-creating effects. Incumbent firms - now partly protected from foreign competition - can raise the domestic price (P_q) above world-market levels. A domestic welfare redistribution occurs from service customers to service producers. However, the net domestic welfare effects are negative.⁷⁰

If quantitative restrictions occur in an intermediary industry like business services, the effects can be extra negative, because the indirect cost-increasing effects (triangle b) spread throughout the economy, following the pattern of intermediate deliveries. Cost-increasing effects arise because the trade restriction prevents existing domestic firms from operating in the most efficient way.

⁶⁹ The upper limit on foreign supply is $AF (=CD)$, instead of unrestricted foreign supply (AB). The effective domestic supply curve becomes P_wGS_q . In other words, beyond OF marginal supplies must come from domestic producers.

⁷⁰ The consumer surplus (of service customers) declines by $a+b+c+d$. The producer surplus (of service producers) increases by $a+c$. Triangles b and d are net domestic welfare losses, the so-called deadweight losses. Triangle b represents the excess cost of producing something domestically which could cheaper have been sourced from foreign suppliers (efficiency loss). Triangle d arises because at the margin some service customers are squeezed out of the market (consumption loss).

In some countries, an additional negative welfare effect can result from the licensing mechanism that is required to operate quantitative restrictions. Licenses must be issued to authorised foreign suppliers and importers. Such licenses are wanted assets, because they are in fact rent-entitlements.⁷¹ The integrity of the licensing authority must be resistant against ‘under-the-counter’ offers by license-bidders and similar irregularities.

Only a few empirical estimates of the welfare costs of trade barriers in BS industries are available, due to empirical difficulties.⁷² Most of the available literature concentrates on trade effects. Barriers to international services trade mostly have the form of non-tariff barriers. Hoekman, a WTO economist, estimated the tariff equivalents of non-tariff barriers for a number of WTO members. These estimates are calculated on the basis of scheduled commitments under the GATS using a three-category weighting methodology.⁷³

The WTO estimates for three services sectors are presented in Table 6.8. The tariff value of non-tariffary barriers at the end of the Uruguay Round was estimated to amount about a quarter of the import price of business services, which is substantially more than for distributive trades, but less than for transport and communications.

Hoekman’s data suggests that non-tariffary trade barriers in BS and financial services caused import prices to be 20-25 per cent above the world market level. This offers domestic BS and financial services suppliers ample possibilities to raise their prices above world market levels. The figures imply that slashing non-tariffary trade barriers through liberalisation and deregulation would lead to more domestic competition in these services industries, lower prices of producer services, followed by lower production costs of final goods. Hence, down-grading of non-tariffary trade barriers would have a strong welfare-increasing effect. Offsetting negative welfare consequences - e.g. related to product reliability, diminished litigability of foreign BS suppliers - must be very large in order to weigh up against a 20-25 per cent fall in the price of BS products. It is worth noting in this respect that countries like the Netherlands already deregulated several operational aspects of its BS industry without experiencing notable negative welfare consequences.

⁷¹ The unit rent for foreign-supplied services amounts to $(P_q - P_w)$.

⁷² The impact of a deregulated BS supply on incumbent firms in BS industry has to be analysed with counter-factual simulation, or through a ‘before-after’ analysis. The problem with the first method is how to construct a proper counter-factual scenario. The second is very data-intensive, since many other potentially influencing factors have to be controlled for. Otherwise, outcomes may be blurred by multi-causality issues.

⁷³ Limitations of the Hoekman method are that the GATS schedules database is rather incomplete, and that his weighting method does not distinguish between barriers in terms of their impact on the economy (OECD 2000e, p.9).

Table 6.8 Ad valorem tariff equivalents^{a)} for the services sector at the end of the Uruguay Round, guestimates for selected countries/regions

Country/ Trade bloc	Business and Financial Services	Transport, storage and communications	Wholesale and Retail Distribution
	in per cent of import price		
Finland	24	181	15
Austria	20	99	5
Sweden	23	184	13
Switzerland	28	178	8
Canada	26	118	9
EU	27	182	10
USA	22	111	5

Notes: a) For quantification purposes, values of 1 (most restrictive, no access), 0.5 (specific bound restrictions) and 0 (free access) were allocated to the market access restrictions listed under GATS, and coverage ratios in national markets were estimated. These ratios were transformed in tariff equivalents by using a set of benchmark tariff equivalents for individual sectors, which ranged from a value of 200 per cent for sectors considered highly restricted (like air transport, postal services, voice telecommunications, life insurance), to values between 20-50 per cent for sectors in which market access was less constrained. By multiplying the coverage ratios with the benchmark set of tariffs, Hoekman calculated tariff equivalents by 1-digit ISIC sector and by country. Sources: Hoekman(1995, p. 47-54); OECD (2000e).

One may ask whether Hoekman's calculation method is sufficiently reliable. It is a pity that the recent trade literature has very few alternative estimates of the price-raising effects of government regulations in producer services industries.⁷⁴ Nguyen-Hong (2000, p.63) calculated the cost-increasing and rent-creating impacts of internationally restrictive regulations in the national markets for a particular BS branch, namely engineering services. Table 6.9 presents some of his results. The domestic price and cost effects of the different types of regulations are generally much lower than the tariff equivalents in Hoekman's estimates. In Europe, the cost impacts are largest in the Austria, Germany and Sweden. Netherlands and the UK take intermediate positions, while the protection effects are smallest in France, Denmark and Belgium. The regulation effects in USA and Japan are larger than in the Netherlands.

Though Table 6.9 only covers one branch in the producer services industry, its results at least imply that Hoekman's estimates in Table 6.8 must be considered with some caution. Further quantitative research on the domestic welfare effects is required. Even if the actual tariff equivalents of non-tariffary barriers only amount to half Hoekman's estimates, then his figures still form a good reason for considering more deregulation in the BS industry. It suggests that the burden of proof for discriminatory aspects in national BS regulations should be reversed:

⁷⁴ Given the importance of business services for promoting economic growth, productivity and efficiency, further research on the quantitative effects of trade-inhibiting national regulations in the BS industry would be warranted.

unless there are very compelling reasons for upkeeping them, the positive welfare effects from removing import-inhibiting BS regulations can be assumed to dominate.

Table 6.9 Impact of restrictive regulations on price and cost in engineering services

Country	Price impact		Cost impact	
	Foreign barrier to establishment	Foreign barrier to on-going operation	All foreign barriers	Domestic barriers to establishment
	in percentages			
Austria	11.1	3.5	14.5	6.8
Germany	4.7	5.5	10.2	2.9
Sweden	5.9	0.9	6.8	0.7
USA	5.1	2.2	7.4	3.8
Japan	3.1	3.4	6.6	2.2
The Netherlands	3.5	0.2	3.7	5.2
UK	2.3	0.2	2.5	1.4
Denmark	0.3	0.8	1.1	0.7
France	0.3	0.6	0.9	0.7
Belgium	0.3	0.2	0.5	0.7

Note: for a brief description of the estimation procedure, cf. OECD (2000e). Source: Nguyen-Hong (2000, p. 63).

So far, we mainly dealt with imports-inhibiting effects of national regulation for BS industry. Table 6.1 suggests that policy measures resulting in *more BS exports*, have quite straightforward positive welfare effects, while policies that contribute to *more FDI outflow* by domestic BS firms have few positive or negative effects for the domestic economy.

The short-term effects of deregulation policies that allow *more FDI inflows in the form of new foreign subsidiaries* probably are mainly positive from a national welfare perspective: technology and knowledge spillovers from abroad, scale-related cost advantages, and more competition in the domestic market.⁷⁵ Interaction with domestic BS suppliers may result in substitution effects, even in the short term. The most likely substitution process is that low-quality and low-productivity BS producers are replaced by high-quality, high-productivity producers.

Ianchovichina *et al.* (2000) find that foreign competition in a domestic oligopolist market can have large 'pro-competitive' effects on price mark-ups. This need not be -or only temporarily so- the case when foreign oligopolists start competing in a less concentrated domestic market.

⁷⁵ As to competition by foreign subsidiaries, Table 5.1 showed that the share of foreign subsidiaries in total turnover of BS industries in most countries was substantially lower than in manufacturing industries.

It is difficult to predict which welfare effects will dominate when entry deregulation causes more *foreign takeovers of local BS firms*. The technology and quality spillover effects may still be positive. However, if the acquiring foreign firm is a strong multinational and perhaps already has some local presence, then domestic supply gets more concentrated and domestic competition may diminish rather than increase. In order to filter out undesired competition effects of deregulated FDI inflows, it may be necessary to uphold a non-discriminatory⁷⁶ test of potential competition effects.

6.4 Conclusions

Professional services in the benchmark countries still are subject to several forms of policy intervention. Most affected are the legal services and accountancy branches. Strong differences exist between the type and strictness of national regulations that apply to BS industry. This explains part of national differences in the internalisation pattern of BS branches.

The Netherlands is among the countries with the most liberal regulation regimes, particularly for foreign BS suppliers. This could explain part of the attractiveness of the Netherlands for foreign BS suppliers, both for imports and for FDI inflows. Germany, France, the USA, Italy and Belgium have strong regulations in place for parts of professional BS branches. The UK and Scandinavian countries are relative liberalised.

National regulations in the BS industry can operate as effective trade barriers. WTO estimated the tariff equivalents of such non-tariffary trade barriers in BS industry. It found that national regulations have very substantial cost-raising effects in the national economies. The burden of proof for trade-discriminatory aspects in national BS regulations should be reversed. Unless there are very compelling reasons for upkeeping them, the positive welfare effects from removing import-inhibiting BS regulations can be assumed to dominate. The extent of welfare gains from trade liberalisation in BS industry should be estimated in further, more specific research.

Because relatively much liberalisation already took place in Dutch BS industry, large shares of the Dutch BS industry have already been exposed to foreign competition, either through imports or through incoming FDI by foreign BS multinationals. This exposure has also brought a learning process that puts Dutch BS firms into a good position to benefit from future deregulation and liberalisation of BS industry in other OECD countries.

⁷⁶ Undiscriminatory with respect the country origin of the acquiring firm.

Policy measures that result in more BS imports and more inflow of direct investment of foreign BS multinationals generally contribute to positive welfare effects for the domestic economy. Such welfare effects have the form of technology and knowledge spillovers from abroad, more competition in the domestic market, scale-related cost advantages, better services quality, and cheaper inputs of intermediary services. Negative competition effects of more FDI inflows can be met with standard national competition tests that do not discriminate on the basis of the country origin of the acquiring BS firm.

Policy measures that promote BS exports generally tend have positive net welfare effects. To a lesser extent, this also holds for measures that support more FDI outflow by domestic BS firms.

7 Factors affecting future patterns of internationalisation in BS industry

This chapter briefly sketches the potential impacts of four important factors on the future forms of internationalisation in BS industry, viz. technological change, further deregulation in national markets, further trade liberalisation, and harmonisation of market regulation regimes in EU countries.

7.1 Technological change

The developments in IT technology clearly led to more separability - in time and place -between production of the service and its consumption. Fax transmission, GSM telephone and Internet increased the possibility to supply knowledge-intensive BS products from a production base in another country. Teleconferencing and broadband-video conferences will add further possibilities in this regard. These and other innovations have quantitative effects on existing cost items (e.g. M costs in the Hirsch model, p.21). But they can also change the structural characteristics of particular branches. The precise implications of technological change will probably differ by BS branch. In some branches it may only change the mode of supply without altering the internationalisation strategy.⁷⁷ In other BS branches, the new technological possibilities can make BS exports more attractive relative to producing the products by local subsidiaries in foreign markets.

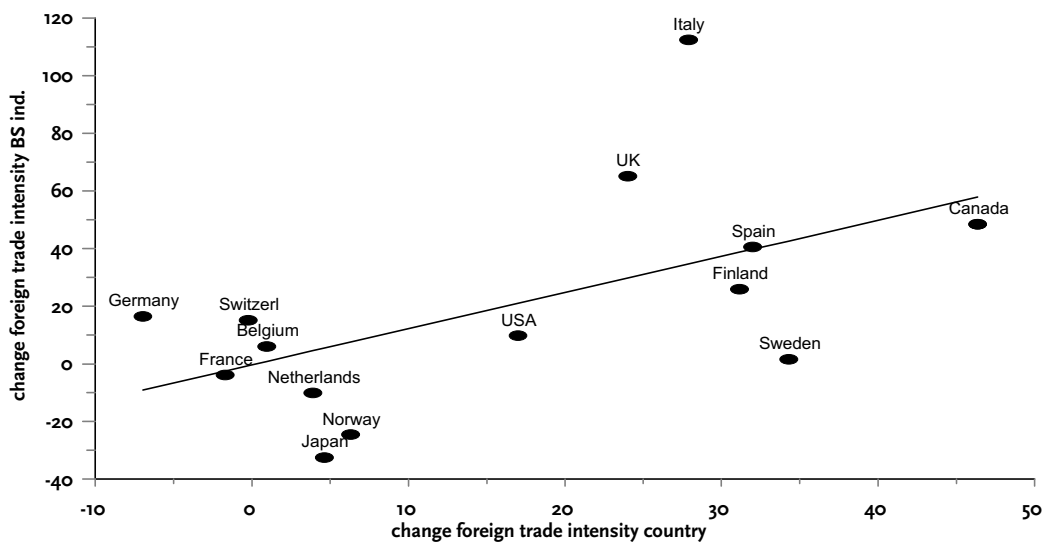
7.2 Further deregulation in national markets

The BS industry in OECD countries has become increasingly deregulated in the 1990s. But still, a good many barriers to international trade in BS products and to foreign direct investment by BS firms are in place. Trade liberalisation and deregulation can be expected to have a more than proportional impact on industries that so far have been sheltered for world market competition. Hence, a positive relation may be expected between increasing trade openness and the shares of BS in a country's exports and imports. The first impact of liberalisation and deregulation will be on import shares. Export shares will follow once the domestic industry becomes more

⁷⁷ Recently, a top manager of Oracle, the world's second largest software company, declared "Within five years, I guarantee that Oracle will not be a software-in-a-box company, but an online software services company". Also Microsoft announced a shift in strategy that seeks to transform the company from a traditional software vendor to an online software services provider (Financial Times, June 22nd 2000; The Economist July 1st 2000).

competitive. The sheltered industry will thus become more integrated in international trade. Foreign trade intensity (exports plus imports as percentage of GDP) can be taken as a proxy for trade openness.⁷⁸ We can expect that: (a) a positive relation exists between the foreign trade intensity of BS industry and foreign trade intensity for the country as a whole; (b) the impact will be more than proportional, i.e. the impact factor (elasticity) will be higher than 1. These expectations have been checked empirically for changes in the period 1991-96, and are both confirmed by the facts. Figure 10 confronts country data on these variables. For the group of countries as a whole, a significant positive correlation was found. It indicates that trade liberalisation and market deregulation in the country as a whole had an extra positive effect on BS industries.

Figure 7.1 Change in foreign trade intensity: relation between BS industry and national economy, 1991-1996



Note: growth data corrected for exchange rate changes.

Regression results: $Y = -20.0 + 1.76 X$

R^2 adj. = 0.53 n = 13 (-1.73) (3.82)

Further deregulation of national BS branches may have several effects on trade and direct investment, depending on the type of prior regulation and the size of the deregulated market. Deregulation –through its price effects– affects intermediate demand for BS products, allows more outsourcing of specialised services, and stimulates demand for new BS products (e.g.

⁷⁸ Foreign trade intensity of the BS industry is defined as the share of combined BS exports and imports in total value added in the domestic BS industry.

specialised temporary labour services, new products by innovating startups).⁷⁹ Deregulation of foreign market entry creates more possibilities for foreign BS firms. National BS markets thus get more closely interwoven. It can also affect the form of market entry by foreign BS firms. If the deregulated national market is large enough, entry deregulation may invoke additional direct investment by foreign BS firms. However, in a low-volume national market, where deregulation thus far implied that foreign firms could only serve it at relatively high cost through a local subsidiary, the latter may be closed and substituted by imports.

In a national market regulated by qualification or nationality requirements of service-providing personnel, loosening of such requirements may lead to an additional inflow of foreign workers employed by domestic BS firms.⁸⁰ Such 'worker imports' may substitute prior imports of BS products. The GATS only regulates the stay of temporary personnel. In the final phase of the Uruguay Round, the USA which already permitted the stay of 65,000 skilled service providers annually, declared its willingness to make this arrangement binding. A number of WTO members (including the EU, Switzerland, Australia and Norway) extended the commitments they had made earlier during the negotiations. Almost all WTO members now have taken on commitments for three categories of service staff, that apply to all services sectors:⁸¹

- Service providers travelling on business may enter temporarily (normally for 90 days) and initiate international transactions. But they may neither sell publicly in the respective country nor provide services themselves in return for payment.
- Intra-corporate transferees, i.e. employees of a service company seconded to a foreign subsidiary of that company, may stay for a longer period - normally 2 to 5 years. This applies to leading personnel and specialists.
- Qualified foreign personnel may enter and stay temporarily in another country in order to carry out service tasks for a limited period of time, without being associated with a foreign subsidiary (e.g. contractual service suppliers).

⁷⁹ In a panel data set for OECD countries over the period 1984-1998, the share of producer services in total employment appeared to be significantly and negatively correlated with the strictness of employment protection regulation (OECD 2000f, p.103).

⁸⁰ The recruitment of foreign IT personnel is an example. Growing domestic scarcity of skilled IT workers recently lead both Germany and Japan to allow for an influx of many thousands of IT engineers from non-OECD countries, particularly from India. US Congress considers similar steps (Financial Times, 10 August , 28 September 2000).

⁸¹ Barth (2000).

7.3 Further trade liberalisation

A movement is under way to relax or abandon regulation aspects that discriminate against foreign services providers. In February 1997, an OECD workshop on professional services made the following specific recommendations for liberalising trade in professional business services.⁸²

The recommendations have been reiterated and extended in OECD (2001b; 2001d):

- Professional services providers should be free to choose the form of establishment (including incorporation) on a national-treatment basis;⁸³
- Remove restrictions on partnership of foreign professionals with locally licensed professionals;
- Remove nationality-based restrictions on market access, including prior residence requirements;
- Review and relax restrictions on foreign participation in ownership of professional services firms;⁸⁴
- Review and relax local presence requirements, subject to availability of professional guarantees or other mechanisms for client protection; and
- National regulatory bodies should co-operate to promote mutual recognition of foreign qualifications and competence, and develop arrangements for upholding ethical standards.

Some of these recommendations are specific for professional services (legal services, accountancy, engineering consultancy and architects). Other aspects are more widely applicable, to other BS branches as well. Since 1997, a number of countries made partial progress in implementing these recommendations.⁸⁵

A further round of trade liberalisation and a follow-up General Agreement on Trade in Services (GATS) will probably tariffify a larger part of non-tariffary trade barriers, and knock off a further part of overall trade barriers. We can expect the standard welfare gains for domestic markets, particularly in the form of lower domestic prices for BS products. Trade liberalisation means that the BS industry and its customers can make better use of price differences in national factor markets. This will occur along two lines, through arm's length trade and through intra-company trade:

⁸² OECD (2000a, p.36). Also OECD (2001c).

⁸³ Incorporation should be permitted for professional services providers. Consumer protection concerns can be addressed by mandating minimum levels of capitalisation or professional insurance. It is non-discriminatory to maintain personal accountability of practitioners for their acts, and the same holds for disciplinary action by professional organisations.

⁸⁴ The quality of service and the independence of professional with respect to outside interests are not necessarily endangered when non-professional investors (of whatever nationality) are allowed to hold minority participation in firms.

⁸⁵ OECD (2000a, Country Annexes).

- Impact on arm's length trade: standardised production elements that do not depend on proximity to the services customer companies can be imported cheaper from independent producers in countries where wages are lower, or where scale effects in production are still unexhausted.⁸⁶
- Impact on intra-company trade: trade liberalisation offers more scope for foreign direct investment flows governed by 'worldwide sourcing' motives. It becomes easier for BS multinationals to locate production elements that do not require proximity to the services customer in those countries where factor costs are lowest. Wage differences for skilled and unskilled workers will become more decisive in such location decisions. The low-cost production subsidiaries can be used as platforms for intra-firm exports to subsidiaries in higher-cost countries.

Trade liberalisation can also be expected to generate more exports of specialised BS products from OECD countries to non-OECD countries, supplied through expatriate workers on short-time assignments.

7.4 Further European integration

The fact that the single European market for BS products still was more a policy desire than a reality did not stop the most competitive national firms in each BS branch from expanding into other EU countries. Often this was done by taking over local firms. Other firms formed joint-ventures or networks with independent national partners in other EU countries (e.g. in accountancy and legal advice). Once harmonisation of EU market regulation regimes becomes a reality, it means that internationalisation barriers are lowered. This will have a positive effect on intra-EU trade and direct investment of BS firms. This is also likely to have a positive effect on average BS firm size in EU countries.

7.5 Conclusions

All four factors (technology, trade liberalisation, market deregulation, intra-EU harmonisation of regulation regimes) will result in more exposure of domestic BS firms to foreign competition and to more internationalisation of national BS industries, either through trade or through increased foreign direct investment.

⁸⁶ The software industry in non-OECD countries, for instance, thrives on the basis of exports of standard software solutions. Table A11 in Annex 4 shows that a number of non-OECD software companies have already become quite large. See also Banerjee and Duflo (2000).

8 General conclusions

This report analysed the exposure of business services industry to foreign competition, either through trade or through foreign direct investment. Internationalisation of the Dutch business services industry is compared to the situation in the USA and a number of EU countries.

In order to streamline the empirical analysis, an analytical framework was adopted and amended from the works of Dunning, Hirsch, Markusen and Vernon. While services branches make up some 70 per cent of total value added in most OECD countries, standard treatments of internationalisation strategies still largely concentrate on manufacturing. The analytical framework has been applied and amended to fit the situation in the services industry.

The theoretic framework offers a micro-foundation for internationalisation decisions by individual firms, in particular the choice between exporting, licensing one's product to an independent foreign supplier, and setting up own production in a foreign subsidiary. Industries highly dependent on intangible assets will be inclined to opt for direct investment. This inclination becomes even stronger if scale economies at plant level are relatively unimportant. Both conditions apply in large parts of the business services (BS) industry. Moreover, in several BS branches, government regulations require that services are provided locally. The upshot of the theory is that the exposure of BS industry to foreign competition will increasingly get the form of direct investment rather than imports or licensing agreements with foreign firms.

A range of operational hypotheses or predictions were derived from the theory. They have been tested in subsequent chapters. The overall result is that the framework stood up quite well against the empirical data in the business services industry. The framework therefore seems worthwhile to be used in further internationally comparative industry studies.

At present, the engagement of most BS firms in international expansion - either through exports or through direct investment - is still limited. The same holds for the exposure of local BS firms to world market competition. Three industry segments can be discerned. The majority of firms has no direct engagement in border-crossing activities. Conversely, a small group of large firms is highly internationalised, meets each other in several national markets, and interacts strategically with each other in an oligopolist competition mode. These multinational companies still dominate foreign investment flows of the BS industry. Most BS exports seem to be generated by an intermediary group of large national-oriented firms. The growth path of this group will have a decisive impact on future direct investment flows in the BS industry. The development of BS exports is largely dependent on small- and medium-sized firms. Another

potential source of additional BS trade could arise once BS multinationals use particular national production subsidiaries as export platforms for servicing foreign high-cost markets.

National regulations still have substantial impact on trade and direct investment patterns in the BS industry. National welfare considerations determine the type and strictness of regulations for the domestic BS market. National regulations sometimes fix minimum qualification criteria for service-providing personnel, or quality criteria for the BS product itself, or they set criteria for business practices in BS industry. National regulations and regulation differences between countries are important variables for location decisions by BS multinationals. Regulatory interventions either operate directly through laws or indirectly, by delegating the regulatory powers to national branch associations.

The empirical results of this study can be summarised in a number of stylised facts on internationalisation of the business services industry. First a series of stylised general facts on trade in the business services industry. Next, a similar series on the role of foreign direct investment in the BS industry. A separate series of findings is presented that pertain specifically to the Dutch BS industry. A final series of findings refers to the role of national regulations and their limiting effects on the exposure of domestic BS industry to foreign competition.

8.1 General empirical findings on international BS trade

- World trade in business services represents a growing share of total world services trade.
- OECD countries account for an increasing share of world trade in business services, both as origin and as destination of BS trade flows.
- Five OECD countries supply two-thirds of all BS exports. During the 1990s, the USA strengthened its leading position.
- In most countries, business services represent an increasing share of total country exports and imports.
- The trade orientation of national BS industries partly reflects the increasing share of BS industries in national economies. Substantial differences exist among benchmark countries as to the change in their structural trade openness.
- As predicted by the theoretical framework, import shares of domestic BS supply fall as domestic demand for business services grows stronger.
- Trade specialisation patterns in business services can only partly be explained from changes in (revealed) comparative advantage.
- BS trade flows have -during the 1990s- shown more business cycle stability than direct investment flows.

- The change in trade openness of countries as a whole had an above-proportional effect on the world-market integration of BS industry.
- Technological developments, particularly in ICT, increase the international tradability of business services. It may increase the role of international trade compared to direct investment in the BS industry.

8.2 General findings on the role of foreign direct investment in BS industry

- In the mid-1990s FDI in the BS industry did not yet have the same relative importance as in manufacturing.
- Since 1985, incoming direct investment flows in services industry in almost all benchmark countries increased stronger than services imports.
- The same result is found for outgoing internationalisation flows: direct investment outflows of the services industry have grown stronger than services exports.
- Intangible assets are more important for competition in client-specific and knowledge-intensive BS branches than in BS branches that produce more or less standardised services products. The theoretical framework predicts that intangible assets necessitate to have a local presence in foreign markets. Indeed it appeared that local production of foreign subsidiaries was more important in BS branches with client-specific and knowledge-intensive products than in BS branches with standardised products.
- The share of services industry in incoming and outgoing FDI flows increased in most countries.
- Foreign-owned BS subsidiaries in host countries over time reduced rather than increased their dependence on intra-company trade. This indicates that BS multinationals do not generally use intra-company sourcing to cut production cost levels.

8.3 Empirical findings concerning the exposure of Dutch BS industry to foreign competition

- The Netherlands is strongly presented in the world BS market. Its BS exports rank sixth and its imports rank in the fifth place.
- The Netherlands have a small export surplus in business services trade.
- During the period 1992-99, the BS share in Dutch foreign trade grew, both for exports and for imports. This is remarkable since the share of services in total Dutch trade stagnates.
- BS imports increased faster than the share of BS industry in Dutch GDP. The Dutch BS market appears to be less sheltered from foreign competition than holds for most benchmark countries.

- Dutch BS exports are relatively unaffected by the growth of domestic BS demand, less than in most benchmark countries. This indicates that exports do not form a residual market. However, BS exports increased less than the BS industry's share in Dutch GDP.
- Foreign trade intensity of Dutch BS industry is among the highest of all OECD countries. This level effect may be one of the reasons that, during the 1990s, foreign trade intensity of Dutch BS industry increased less than for the total Dutch economy.
- Small and medium-sized firms have a weak export orientation. Most BS exports come from large firms.
- Strong growth of domestic BS demand was associated with a falling share of imports in domestic BS supply. This probably reflects the growing importance of production by foreign BS subsidiaries in the Netherlands.
- Estimated production of foreign BS multinationals in the Netherlands indeed appeared to react positively to the change in total Dutch BS demand (imports plus domestic production).
- For Dutch BS industry, direct investment inflows since the 1990s accounted for a sharply increasing share of total fixed capital formation. The same held for direct investment outflows by the Dutch BS industry.
- During the period 1984-98, the share of *Business and 'other services'* in Dutch foreign direct investment stocks increased more than in other Dutch industries. This held both for foreign-owned FDI stock in the Netherlands and for Dutch-owned FDI stock abroad.

8.4 How policy regulation affects the exposure of domestic BS industries to foreign competition

- Regulatory policies towards BS industries are based on several national welfare considerations: balance of payment contribution; contribution to domestic employment, value added creation, and tax basis; transfer of technologies, knowledge and quality aspects to domestic firms; impact on domestic competition in BS industry, and finally, preservation of positive externalities that a good-functioning BS industry has for national societies.
- Most affected by these regulations are professional services like legal services and accountancy branches.
- Strong differences still exist between the type and strictness of national regulations that apply to BS industry. This explains part of national differences in the internalisation pattern of BS branches.
- Germany, France, the USA, Italy and Belgium have strong regulations in place for parts of professional BS branches. The UK and Scandinavian countries are relative liberalised.

- The Netherlands is among the countries with the most liberal regulation regimes, particularly for foreign BS suppliers. This could explain part of the attractiveness of the Netherlands for foreign BS suppliers, both for imports and for FDI inflows.
- National regulations in the BS industry can operate as effective trade barriers, even if that was not the intention of the policy maker.
- WTO estimated the tariff equivalents of such non-tariffary trade barriers in BS industry. They found that national regulations have very substantial cost-raising and price-raising effects.
- Positive welfare effects from removing import-inhibiting BS regulations can be assumed to dominate, unless there are very compelling reasons for upkeeping them. This is a reversal of the present burden of proof.
- Policy measures that result in more BS imports and more inflow of direct investment of foreign BS multinationals generally contribute to positive welfare effects for the domestic economy.
- Such welfare effects have the form of technology and knowledge spillovers from abroad, more competition in the domestic market, scale-related cost advantages, better services quality, and cheaper inputs of intermediary services.
- Standard, non-discriminatory competition tests are sufficient for staving off negative competition effects of foreign takeovers of domestic BS firms.
- Because relatively much liberalisation already took place in Dutch BS industry, large shares of the Dutch BS industry have already been exposed to foreign competition, either through imports or through incoming FDI by foreign BS multinationals.
- This exposure has also brought a learning process that puts Dutch BS firms into a good position to benefit from future deregulation and liberalisation of BS industry in other OECD countries.
- The exposure of domestic BS industries to foreign competition will grow due to the influences of technological change, trade liberalisation, further deregulation in national markets and intra-EU harmonisation of regulation regimes.

8.5 Areas for policy discussion

- Foreign expansion through direct investment is an expansion strategy that - as a rule - is only feasible when firms have reached a certain minimum size. Foreign direct investment in all BS branches is still governed by a relatively small sub-set of large BS firms. Most of them are of foreign origin. Only a few Dutch BS companies have subsidiaries in foreign markets. Their expansion through further direct investment can be hampered by national regulations in other BS markets. Few, if any, welfare gains for the Dutch economy are expected from an active policy to support further direct investment by these companies.

- Exports form the most feasible way for small and medium-sized enterprises (SME) to exploit their intangible assets in foreign markets. Strengthening the export basis of these companies yields positive welfare effects for the domestic economy in terms of value added, employment, scale advantages and learning effects. Few negative welfare effects are envisaged for such policy.
- A number of policies could contribute to export growth by SME firms in the Dutch BS industry:
 - promoting further progress as to the freedom of movement across borders for service-providing personnel;
 - promote a better legal protection of intangible assets in the BS industry, through copy rights and/or patents. In the context of the upcoming EU harmonisation of national patent policies, it may be worthwhile to re-evaluate the possibilities for patents on services activities and services products.
 - an active negotiation and information policy to achieve that trade-discriminating market regulations in foreign countries are lowered, stressing that this will yield welfare gains for the foreign country and the exporting country.
 - an active negotiation and information policy to achieve harmonisation of national market regulations for BS products, because it lowers information-cost barriers for SME firms and achieves intra-European welfare gains.
 - achieve mutual recognition of national qualification criteria for personnel that provides BS products abroad.
 - achieve European quality-guaranteeing arrangements for specific BS products and branches. This would take away the incentive for national governments to require that foreign BS-providers have a (legally liable) local subsidiary.
 - create facilities for Dutch BS firms to engage in twinning agreements with SME branch partners in other EU countries, so that mutually beneficial scale advantages can arise.
 - active support of telecommunication infrastructures (e.g. electronic highway, broadband data transfer) that support a greater tradability of BS products. Such measures lower cost barriers of exporting and may enhance product innovations.
- Large net welfare gains for the national economy can be achieved by allowing more imports of BS products: technology and knowledge spillovers from abroad, better services quality, more competition in domestic BS markets, scale-related cost advantages, and cheaper intermediary BS inputs for Dutch firms. Buyer protection for some knowledge-intensive professional business services can be shaped in a non-discriminatory way. On balance, removal of remaining barriers for imports of BS products is expected to have positive net welfare effects. Several of the aforementioned measures that promote exports by small- and medium-sized Dutch BS firms will also have a positive effect on BS imports in the Netherlands.

- Policies that promote more direct investment inflows by foreign BS multinationals can have many positive welfare effects for the national economy: technology and knowledge spillovers from abroad, scale-related cost advantages, better services quality, and cheaper inputs of intermediary of intermediary services. Hence, removal of discriminatory elements (against foreign suppliers) in market entry regulations or in operational requirements for BS firms, will have positive welfare effects.

The only aspects that needs to be monitored more closely in the case of foreign direct investment is whether market entry by the foreign BS multinational strengthens or limits competition in the Dutch market. This issue can be particularly relevant when the foreign BS multinational intends to take over a Dutch firm solely for increasing its market share in the Netherlands. A standard test of competition effects by the Nederlandse Mededingings Autoriteit is sufficient for dealing with this issue.

- Policies that promote harmonisation of EU market regulation regimes will have a positive effect on intra-EU trade and direct investment of BS firms. It also tends to increase the currently small average firm size in business services industry.
- The BS market in Europe calls for more policy clarity on the possibilities for integrated multi-branch BS firms ('one-stop-shopping'). This issue has become particularly important since the US regulators put more emphasis on delinking accountancy and other BS branches. Clear and harmonised EU market regulations are called for on this issue.
- Relatively much liberalisation already took place in Dutch BS industry. The Dutch economy is already an open, trade-oriented economy. It exposed large shares of the Dutch BS industry to foreign competition in the forms of imports and incoming direct investment. The concomitant learning process may put Dutch BS firms into a good position to benefit from future deregulation and liberalisation of BS industry in other OECD countries. Hence, support of further WTO/ GATS negotiations on liberalisation of international services trade in general, and BS trade in particular, will work out positively for the position of Dutch BS industry.
- Insights into the growth characteristics and growth perspectives of BS industry requires that much more effort is invested in the improvement of national statistics on direct investment and international trade of the BS industry. The current quality and detail level of these statistics is still insufficient, also in the Netherlands.
- Also, further quantitative study is needed to determine the magnitude of welfare costs caused by non-tariffary trade barriers (e.g. national regulations) in BS trades. Such studies can be

particularly relevant for policy, because BS industry is getting increasingly important in the inter-industry network of intermediate deliveries, and because BS industry itself during the last decade has been characterised by a sloppy productivity growth. If the stagnating productivity development can be remedied by more exposure to foreign competition, this may have a strong contribution to future economic growth. The empirical and the political case for such liberalisation policies can be strengthened when the potential welfare gains are quantified in authoritative studies.

Annexes

Annex 1

The impact of firms-specific assets: summary of the Markusen decision model for choices between setting up a local subsidiary versus foreign licensing

Annex 2

Data sources on foreign trade in (business) services

Annex 3

Data sources on foreign direct investment in (business) services

Annex 4

Selected branch-level data on the role of multinational companies in business services

Annex 5

Rejected explanations for the country pattern in BS trade specialisation

Annex 1 The impact of firm-specific assets: summary of the Markusen decision model for choices between setting up a local subsidiary versus foreign licensing

Markusen (1995) and Ethier & Markusen (1991) present a two-period model of a multinational enterprise (MNE) that wishes to exploit a technology (product formula, brand) in a foreign market. The MNE can do so by licensing it to a foreign firm or by setting up local subsidiary, but not by exports.

The assumptions are:

- The licensee needs one period to master the technology. At the beginning of the second period the MNE and the licensee make simultaneous moves, choosing whether to continue their original relationship. The licensee pays a license fee L_i in each period i ($i=1,2$).
- No binding licensing contracts can be written to prevent the MNE or the licensee from defecting in the second period. The MNE can defect by issuing a license to a second firm in period 2. The licensee can defect by starting its own firm on the basis of the MNE's technology.
- If the MNE or the licensee defect, then the original licensee and a new licensee will compete as duopolists in the second period.
- For starting production with the technology the licensee or the MNE incur a physical capital cost F . If one partner defects, that partner must incur the additional costs of F , the non-defecting partner retaining the original.

Commercial exploitation of the technology yields a total amount of rents in each single period.

The total amount of rents differs in the three possible scenarios:

R: rents when the original license contract is respected

M: rents when the MNE sets up a local subsidiary

D: total rents for the two duopolists when the MNE and/or the licensee defect.

Over the 2-period scenarios - license contract, local subsidiary, defection/duopoly - cumulative net rents amount to $(2R - F)$, $(2M - F)$ and $(R + D - 2F)$, respectively.

- Markusen adds two numerical assumptions on the total rent level in the scenarios. Because establishing a business abroad brings additional costs compared to local producers (cf. Z costs in the text box on p.21), it holds that: $R > M$. Furthermore, duopoly creates more price competition, resulting in: $M > D$. Both assumptions mean that cumulative net rents over the two periods must have the following relation: $(2R - F) > (2M - F) > (R + D - 2F)$.
- The licensee only respects the contract if his second-period earnings are at least as high as what he can earn by setting up an independent production line. That is, if $(R - L_2) \geq (R - F)$.

Markusen assumes that the MNE respects the contract if its licensing fee is at least equal to $L_2 \geq (R - F)$, its payoff from defecting.⁸⁷

It is now possible to derive the defection conditions and the distribution of total rents in each of the scenarios. Combining non-defection conditions of both contractants, the license contract is only respected in the second period if: $R < 2F$.

If the $R < 2F$ condition holds, the multinational will license and extract all available 2-period rents. In the second period, the fee $L_2 = F$ is the largest fee that the MNE can extract without causing defection. It leaves the licensee rents that amount to: $(R - L_2) = (R - F)$. A rational MNE will therefore extract most rents in the first period when defection is not possible:

$L_1 = (2R - F)$. In the end, the MNE has collected all available 2-period rents: $(L_1 + L_2) = 2R$.

In the case that $R \geq 2F$, the licensee will defect, and a duopoly game results in the second period. The original licensee, now on its own, generates a net second-period profit of $(D/2 - F)$, while the new licensee generates $(D/2)$, using the original capital stock F . Knowing that defection is coming in period 2, the MNE can maximally charge the licensee a first-period fee of $L_1 = (R + D/2 - F)$, thus taking away the latter's possible second-period profits. The new licensee is charged a fee of $L_2 = D/2$.

Hence, total 2-period profit of the MNE amounts to: $(L_1 + L_2 - F) = (R + D - 2F)$. While the MNE earns all rents in the duopoly case, it also incurs additional fixed costs, while some rents are dissipated by duopoly competition. The upshot is that, if $R \geq 2F$ holds, the MNE will seek to avoid the duopoly outcome and instead set up a subsidiary.

Finally, consider the situation that the MNE technology (product formula, brand) is a pure knowledge-capital technology for which it holds that $F \approx 0$. It implies that the licensee can costlessly enter production in the second period after one period of learning by doing. With $F \approx 0$ it is clear that the $R < 2F$ will fail to hold, and licensing will not sustain itself. The result is that the MNE, right from the beginning, chooses a costly subsidiary over a rent-dissipating licensing contract.

⁸⁷ Defection depends on opportunity costs. For the MNE, the alternative is nominating a second licensee, incurring additional F investment, and receive lower rents in a subsequent duopoly situation. Hence, it is arguable that the MNE's non-defection condition should be $L_2 \geq (D/2 - F)$ instead of the condition formulated by Markusen (HK). This implies that the non-defection condition for the licensee is $(R - L_2) \geq (D/2 - F)$.

Annex 2 Data sources on foreign trade in (business) services

Since the conclusion of the General Agreement on Trade in Services (GATS), emergency plans resulted in efforts to improve international production and trade statistics for services.⁸⁸

International organisations recently agreed on a provisional draft Manual on Statistics of International Trade in Services (OECD 2000b), a trail-blazing work that offers guidelines for improved and internationally harmonised registration and harmonisation of trade and direct investment in services. The OECD also initiated an innovative statistical database on Foreign Affiliates Trade in Services, or shortly: FATS (OECD 1999a; Belli and Peyroux 1999). Despite such endeavour, the present state of affairs is still that disaggregated time series on international trade in services are only to a limited extent available for many European countries including the Netherlands. Data availability for the USA is much better (e.g. Mann et al. 1999). The ISDB databank of OECD only contains very few import and export data for business services.

Internationally comparable data on services trade with a sufficient degree of detail are only very recently becoming available. In 2000, OECD for the first time published its SITS database, Statistics on International Transactions in Services. For most benchmark countries in this study, the data only cover the period 1991-1996.

International trade in business services is scattered over several balance-of-payment items. In this report, BS trade is measured as the sum of the following items: Miscellaneous business, professional and technical services, Computer and information services and Operational leasing services. These data are available for most of the relevant countries.⁸⁹

Most BS exports have their origin and destination in OECD countries. This country group increased its share in total world services exports in recent years. Recent growth of world trade in commercial services was almost exclusively concentrated in the USA and the European Union (WTO Newsletter Focus, No. 45, March-April 2000).

The tradability of services depends on the degree to which a product can be separated from its production process. The BS industry generates some easily tradable products that can be shipped from the production site (standard software in boxes) or transmitted through the internet. Other BS products are less separable, but they can still be traded internationally. It requires that either the producer or the consumer crosses the border.⁹⁰ Karsenty (1999) gives

⁸⁸ An important international forum for such debates was the so-called Voorburg Group of national statistics bureaus in European countries. The EU launched an initiative to improve registration of services production in member countries (Eurostat 1998). In the Netherlands, CBS (Statistics Netherlands) is to take over registration of international trade in services from De Nederlandsche Bank. A major effort is invested in designing and validating volume indicators for international trade in services (Gras 1998).

⁸⁹ Some caution is warranted as coverage of these items varies from one country to another.

⁹⁰ E.g. Boddewyn *et al* (1986); Dunning (1989, p. 39).

rough estimates of world trade in services in 1997 by mode of supply. Following the GATS framework, Karsenty uses a very broad definition of international services trade, consisting of four supply modes:

(A) Cross-border supply without physical movement of producers and consumers (value \$ 890 bln or 41% of total services trade); (B) Consumer comes to producer country, like in case of tourism (value \$ 430 bl, or 19.8% of total services trade); (C) Local production abroad (value \$ 820 bln or 37.8% of total world services trade); and (D) Cross-border movement of service-supplying personnel (value \$ 30 bln or 0.1% of total world services trade).

A few comments are in place with regard to these estimates. Firstly, the only reason for linking trade and local production is probably that trade regulation and market liberalisation issues are closely linked in WTO negotiations in services. For analytical purposes, the two forms of servicing a foreign market should be clearly distinguished. Secondly, the flow reported under mode A consists of two elements: a flow of products that are sold internationally without spatial movement of producer and consumer, and a trade flow generated by BS employees on short assignments abroad. Although no detailed figures are available, it can be expected that the latter flow is substantial.

A significant part of BS exports results from employees travelling abroad on short-term assignments to supply the BS service to local clients. When such assignments do not pass a threshold duration of three months (often a tourist visum maximum), several countries do not (yet) report these flows in the balance of payment item 'expatriate earnings' (mode D).

The balance of payments item *Royalties and license fees* contains at least some BS exports and imports, like license fees for patents or software originating from the software and engineering branches.⁹¹ Royalty payments for intra-company services within multinational BS firms would also fall under this heading. Royalties and license fees represent a considerable share in services exports in some countries (USA, UK). The problem is that -as of now- no data are available on industry destination and industry origin of border-crossing royalties payments. This also holds for the Netherlands (direct communication by DNB). Over the period 1982-1988, two-thirds of incoming Dutch license payments had an intra-company character, and the same held for more than more than three-quarters of outgoing payments. In that period, 5 to 10 per cent of all Dutch incoming license payments were destined for the services industry (De Bruijn-Schintz and Janning, 1989).

⁹¹ Payments related to the sales of patents and copyrights (rather than payments related to the right to use them) are also registered under this item, in spite of IMF recommendations in the IMF Balance of Payment Manual (5th). Patents and copy rights should rather be regarded as capital asset items. Not all countries make this distinction in their BOP data. The Netherlands is one of the countries which does not (DNB, Statistisch Bulletin, June 2000, p.119).

Annex 3 Data sources on foreign direct investment in (business) services

What we are interested in, is the changing importance of foreign-owned production facilities in the BS industry. Foreign direct investment flows are only a proxy for estimating this changing role. FDI flows basically measure the financial flows between parent companies and their subsidiaries.⁹² But the FDI flows constitute only one source of investment funds for foreign-owned subsidiaries.

FDI flows measure equity investment, capitalised investment in kind (e.g. capital goods), intra-firm loans, and retained earnings. DNB estimates retained earnings of foreign subsidiaries on the basis of an annual survey (Van Beers et al. 1999, p. 13). FDI flows often are net flows, indicating the balance of flows from parent to subsidiary and flows from subsidiary to parent (eg De Nederlandsche Bank Statistisch Bulletin , June 2000, p.120).

The subsidiaries can also grow by attracting capital from other sources like banks or financial institutions in home country, host country, or elsewhere. This growth source remains hidden in FDI flow data. US and Japanese data on the financing structure of subsidiaries in 1992-1994 show that FDI flows catch only 25 per cent of the change in foreign-affiliate assets (UNCTAD 1997, p. 26-28).⁹³ Stated otherwise, three-quarters of the growth of foreign affiliate assets -and probably also affiliate production- remains uncovered when we only look to FDI flows.⁹⁴ This is an average for all industries. No specific estimate is known for BS industry. This non-measurement problem can be circumvented partly by using data both FDI stock data and FDI flow data. With stock data one can get a more complete picture of FDI development over time. FDI flow data probably form the most time-consistent data set. FDI stock data cannot meaningfully be used for calculating year-on-year changes (as an alternative to FDI flow data), because stock changes are affected by exchange rate fluctuations and by asset valuation methods that may change over time.

The available internationally comparable datasets on FDI flows are IMF data and the OECD IDIS database. The data for individual countries in the OECD IDIS database show implausibly large 'jumps' from one year to another, suggesting that statistical data revisions play an important role. We compared IDIS data for incoming flows in Dutch BS industry with data reported in publications by De Nederlandsche Bank. The IDIS data appear to be implausibly

⁹² FDI flows measure equity investment, capitalised investment in kind (e.g. capital goods), intra-firm loans, and retained earnings. DNB estimates retained earnings of foreign subsidiaries on the basis of an annual survey (Van Beers et al. 1999, p. 13). FDI flows often are *net* flows, indicating the balance of flows from parent to subsidiary and flows from subsidiary to parent (e.g. De Nederlandsche Bank Statistisch Bulletin , June 2000, p.120).

⁹³ UNCTAD (1997, p. 26-28).

⁹⁴ This is an average for all industries. No specific estimate is known for BS industry.

low. For these reasons, IDIS data on FDI flows for BS industry must be regarded insufficiently reliable at this moment.

Other valuable supplementary information can be derived from the OECD/Eurostat 'FATS' data base, containing information on the trade performance of foreign affiliates. This database came available in autumn 1999 and will be updated (OECD 1999a, 1999c, 2000d). So far, the database only contains data on the FDI performance in a limited number of years, in a limited number of industries, and in a limited number of countries. National definitions and industry demarcations in the FATS data base are not homogenised yet.

Annex 4 Branch-level data on the role of multinational firms in BS industry

Table A1 Engineering services: foreign affiliates, survey data 1996

Enterprises with affiliates	Denmark	Germany	France	Sweden
	percentage of all enterprises			
Enterprises with foreign affiliates	8.2	2.2	13.8	5.1
Enterprises with domestic <u>or</u> foreign affiliates	16.7	6.1	34.7	21.8

Source: Eurostat, Business Services Statistics: Engineering Services, Luxemburg 1998.

Table A2 Engineering services: role of foreign-owned enterprises, 1995 (survey data)

	Denmark	Germany	France	Sweden
	foreign-owned enterprises as percentage of all enterprises			
Share in total number of enterprises	2.9	0.9	3.0	7.2
Share in total turnover	12.9	7.1	2.8	14.3

Source: Eurostat, Business Services Statistics: Engineering Services, Luxemburg 1998.

Table A3 Firms in engineering and architectural services: relative positions of national firms (by number of employees), 1998/1999

	Number of firms in global		
	top-10	top-50	top-100
US	6	19	34
Canada	2	6	6
Great Britain	1	8	11
The Netherlands	1	7	9
Sweden	0	3	6
Den mark	0	3	3
Japan	0	1	8
Germany	0	0	2

Data: Swedish Federation of Architects and Consulting Engineers (1999).

Table A4 Top five advertising agencies in individual EU countries, 1997 gross income, in US\$ mln

The Netherlands		Germany	United Kingdom
BBDO Netherland (45.0)		BBDO Germany (201.0)	J. Walter Thompson (139.9)
PMS & vW/Young & Rubicam (37.1)		Grey Gruppe Deutschland (109.4)	Ogilvy & Mather (119.3)
Publicis (30.4)		Publicis (72.4)	Saatchi & Saatchi (41.4)
PPGH / J.Walter Thompson (28.3)		Ammirati Puris Lintas Deutschland (70.8)	McCann-Erickson UK (112.5)
Ogilvy & Mather (28.3)		Young & Rubicam (70.7)	Young & Rubicam UK (108.0)
France		Italy	Denmark
Euro RSCG France (275.8)		Armando Testa Group (55.1)	Grey Communications Group (25.3)
Publicis Conseil (176.6)		Barbell Gagliardi Saffirio/DMB&B (45.2)	Bates Group (20.4)
DDB France (143.5)		Young & Rubicam Italia (43.2)	Young & Rubicam Denmark (15.3)
BDDP France (126.3)		McCann Erickson Italia (41.4)	BBDO Group (14.5)
Ogilvy & Mather (69.3)		Saatchi & Saatchi (35.3)	DDB Needham Group (11.9)

Sources: Advertising Age International, 29 June 1998; Ministry of Trade and Industry (2000a)

Table A5 Multinational advertising agencies with offices in more than 40 countries (1994)

Advertising group	Agency	No. of countries	No. of clients operating in more than 10 countries
WWP	Ogilvy & Mather	61	27
	J.Walter Thompson	65	23
Omnicon	BBDO	63	25
	DDB	74	16
	Needham	74	16
Interpublic	Lintas	49	14
	Lowe Group	54	6
	McCann Erickson	90	34
Cordiant	Saatchi & Saatchi	69	22
	Bates	57	19
Others	DMB & B	57	8
	Euro RSCG	47	13
	Grey	67	36

Source: WTO (1998c)

Table A6 Ten largest accountancy firms in the Netherlands: 1998

Company	1998 turnover	share in top-10 turnover
	in mln euros	percentage
Ernst & Young (US)	541	23
KPMG (US)	529	22.5
PriceWaterhouseCoopers (US)	522	22.2
Deloitte & Touche (US)	402	17.1
Arthur Andersen (US)	78	3.3
BDO CampsObers (NL) ^{a)}	74	3.1
Abab (NL)	56	2.4
Gibo Groep (NL)	55	2.4
Paardekoper & Hoffman (NL) ^{b)}	51	2.2
Walgemoed (NL) ^{a)}	47	2

Notes: a) amalgamated 1999. b) Merged in 2000 with French accountancy firm Mazar, active in 49 countries with 5000 employees and a turnover of approximately euro 500 mln. Sources: Het Financieele Dagblad (9 December 1999; 15 September 2000).

Table A7 The 'Big Five' Accountancy firms: selected data for 1997

Company / Group	No. of countries in which operating	No. of employees
Arthur Andersen	78	58000
Deloitte Touche Tohmatsu	132	82000
Ernst & Young International ^{a)}	132	82000
KPMG International	155	85000
PriceWaterhouseCoopers	152	140000

Note: a) Its consulting arm merged with Cap Gemini in 2000. Source: WTO (1998b); Financial Times.

Table A8 Software: largest companies in 1997 international market for Enterprise Resource Planning (ERP) software, 1997

Company	Country	Sales (mln US\$)	Market share
SAP	Germany	3520	32
Oracle appl.	USA	1540	14
Peoplesoft	..	770	7
JD Edwards	..	663	6
Baan	Netherl.	658	6
SSA	..	440	4
JBA	..	330	3
Intentia	..	220	2

Data: Metzler Equity Research / Financial Times (14 October 1999).

Table A9 Leading international law firms by number of partners in 1988

Firm name	Country	Number of partners
Baker & McKenzie	USA	404
Jones Day	USA	306
Sidley & Austin	USA	231
Blake Cassels	Canada	227
Morgan Lewis	USA	216
Mayer Brown	USA	215
McDermott	USA	214
Clifford Chance	UK	193
Malleson Stephen	Australia	103
Francis Lefebvre	France	70
Kim & Chang	Korea	47
Loyens & Volkmaars	Netherl.	45
Deacons	Hongkong	30

Source: WTO (1998c)

Table A10 Leading international law firms by number of foreign offices in 1999/2000

Firm name	Country	No. of partners	No. of foreign offices	No. of lawyers	Percentage of lawyers outside home country
Baker & McKenzie	USA	535	35	2330	79.6
White & Case	USA	172	24	742	46.8
Clifford Chance	UK	570	20	3100	62.0
Linklaters	UK	207	17	1210	..
Allen & Overy	UK	175	17	1136	34.5
Freshfields	UK	275	15	1448	51.1
Skadden, Arps	USA	285	11	1187	7.6
Shearman &	USA	140	9	683	25.0
Cleary, Gottlieb	USA	136	8	492	32.9
Sullivan &	USA	119	7	454	12.6
Weil, Gotschal &	USA	160	6	640	18.6
Slaughter & May	UK	102	6	590	13.2

Source: The Economist, 26 February 2000.

Table A11 Leading software companies from non-OECD countries, 1999

Firm	Sales mln US\$	Home country exports as % of total sales	Profits mln US\$	Return on equity in %	Market value mln US\$
Dimension Data holdings (S. Africa)	962	..	78	33.0	6576
Tata Consultancy Services (India)	483 ^{a)}	88 ^{b)}	115	..	..
Infosys Technologies (India)	198 ^{a)}	68	64 ^{a)}	34.3	10383
Check Point Software Techn. (Israel)	142 ^{b)}	..	70	39.8	13632
HCL Technologies (India)	66	85	23	..	3837
Satyam Computer Services (India)	152 ^{a)}	67	30 ^{a)}	80.8	2967
Wipro (India)	227 ^{d)}	66	..	..	9526
for comparison:					
Getronics (Netherlands)	3401	..	104	54.2	5625
Cap Gemini (France) ^{c)}	3997	..	247	10.5	22629

Notes: a) 2000 data. b) 1998 data. c) Merged with Ernst & Young consulting arm in 2000. d) Estimate. Data sources: Business Week, 10 July 2000; Financial Times (1 December 1999, 9 August 2000).

Annex 5 Rejected explanations for the observed change in BS trade specialisation of the benchmark countries

Three competing, but less successful explanations have been investigated for explaining the country pattern in BS trade specialisation (section 4.2). These are:

- A. BS trade specialisation patterns are determined by 'classic' comparative advantages of countries. An implicit assumption here is that BS products can - in majority - be considered as tradables.
- B. If BS products are in majority non-tradables, international trade in these products only has a supplementary role to the domestic market. BS imports are used to supplement domestic production, while the export market is a residual market (secondary to the domestic market).
- C. Changes in BS trade shares are caused by a structural shift from a sheltered to a non-sheltered market regime. Trade liberalisation will have a more than proportional impact on industries that so far have been sheltered for world market competition. Hence, a positive relation may be expected between increasing trade openness and BS trade shares.

These alternative explanations will subsequently be dealt with, first separately and subsequently in a multiple regression context.

Re: A) BS trade shares are determined by comparative advantage. Classic trade models explain specialisation tendencies from changes in comparative advantages and changes in factor prices. A standard instrument to empirically measure such aspects is the revealed comparative advantage method (RCA).⁹⁵ It assumes that a country's actual trade specialisation pattern reflects its relative competitiveness and the underlying pattern of comparative advantages. The RCA is calculated as:⁹⁶

$$RCA = 100 \ln \left(\frac{x_j}{m_j} \frac{X}{M} \right)$$

in which: x_j, m_j : country exports (imports) of product j

X, M : the country's total merchandise exports (imports).

⁹⁵ An alternative is the domestic resource cost (DRC) method that compares the costs of producing a given service domestically with the costs of sourcing it from the world market. It shows possible foreign exchange savings from doing so. The method may be useful for standardised products, but is practically impossible to apply to business services where most products are client-specific.

⁹⁶ The alternative RCA-index specification $RCA_{ij} = 100 * (x_{ij} - m_{ij}) / (x_{ij} + m_{ij})$ in which i is the country and j the traded commodity, as suggested by Greenaway and Milner (1993), has been calculated as well. It leads to almost identical conclusions as the RCA-index presented here. The 'Balassa specification' of RCA (Balassa, 1965) only considers export specialisation: $RCA = 100 * (x_{ij} / x_w) / (\sum x_i / \sum x_w)$ in which w is the world. This index is less appropriate here, because it disregards the import structure (may yield a bias in case of much intra-industry trade), and because country-size effects may bias the outcome (large countries tend to have more diversified exports). A drawback of all RCA indices is that actual trade patterns are also influenced by policy interventions (regulations, trade barriers).

Table A12 gives empirical RCA values for business services in a range of countries, for 1991 and 1996. The 1996 data suggest large comparative advantages for the USA and the UK, and smaller advantages for Belgium and France. The Scandinavian countries, Germany, Japan, Italy and Netherlands according to this method would have a disadvantage in business services. The change in revealed comparative advantage (RCA) over the period 1991-1996 in many cases appears to be at odds with the actual trade specialisation pattern that emerged from Figure 4.2 in the main text.⁹⁷ The data printed in bold are those that do not match:

Table A12 Changing country competitiveness in BS trade: ^{a)} revealed comparative advantage, 1991-1996

	1991	1996	RCA change	PM: change direction exports and imports share b)
Belgium/Luxemburg	1.9	13.7	11.7	southwest (-)
Finland	-44.6	-28.3	16.4	northeast (+)
France	0.7	12.9	12.2	southeast (-/+)
Germany	-14.2	-30.3	-16.1	northeast (+)
Japan	-67.9	-46.2	21.7	southwest (-)
The Netherlands	6.3	-9.4	-15.7	northwest (+/-)
Norway	-62.8	-58.5	4.3	southwest (-)
Spain	-46.1	-19.1	27.0	northeast (+)
Italy	-16.8	-49.9	-33.1	northeast (+)
Sweden	-4.4	-4.8	-0.4	southwest (-)
UK	62.4	81.9	19.5	southeast (-/+)
USA	67.2	58.7	-8.5	northeast (+)

Note: a) The trade items 'Miscellaneous business, professional and technical services', 'Computer and information services' and 'Operational leasing services'. b) The change directions correspond with Figure 4.2. Those printed in bold do **not** correspond with the perceived RCA change. Data source: OECD, Services: Statistics on International Transactions (SITS), June 2000.

These contradictory outcomes put in doubt whether country trade specialisation patterns with regard to business services can sufficiently be explained from comparative advantages and factor price differences. An explanation in terms of comparative advantage might apply in the case of France, where we observe a 'communicating vessels' type of specialisation: increasing export shares and falling import shares. Such a pattern, however, only is found in France. In all other countries the import and export shares move in the same direction: either they both fall or they both rise. The conclusion is that BS trade specialisation in most countries cannot adequately be explained by comparative advantages. An implied conclusion is that BS products cannot across the board be considered as tradables.

⁹⁷ It necessarily means that the relative changes in import and export shares of the country's *other* trade items move in a different direction than those for BS products.

Re: B) BS products are in majority non-tradables, and their trade shares mainly reflect structural growth in domestic demand. If this explanation holds, BS imports are used as a supplementary source for satisfying domestic demand, while BS exports form a residual market outlet, after serving the domestic BS market. In order to test this explanation, we have defined domestic demand for business services as domestic value added of the BS industry plus BS imports minus BS exports. If domestic BS demand grows at the same pace as GDP, it is unlikely that much change will be seen in the share of BS in a country's international trade. Therefore, we concentrate on the structural change in domestic BS demand, i.e. the change in domestic BS demand less GDP growth. Two operational hypotheses are put to a test:

- A positive correlation between structural domestic BS demand growth and BS import shares: relatively more will be imported when domestic demand is in a structural demand growth phase, and less in case of relative stagnation;
- A negative correlation between structural BS demand growth and BS export shares: if domestic BS demand grows structurally, a larger share of production is destined for the domestic market, so that the share of BS in exports falls.

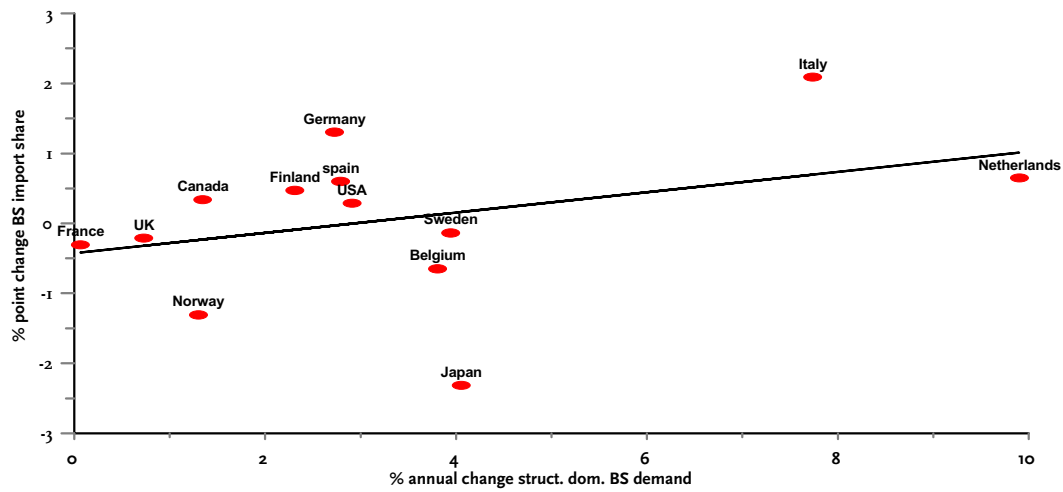
The considered period is 1991-1996. Because of lacking more specific price deflators, trade data of a country were deflated with the national GDP deflator. Data come from OECD data bases (SVAE, SITS) and World Bank (WDI).

The regression coefficients in both cases display the expected signs. However, correlations both for exports and for imports are so weak that the null hypotheses cannot be rejected with sufficient confidence, as is reported in Figures A1 and A2.

This negative result does not exclude the possibility that –for individual countries– non-tradability explains the changing role of BS in the country's trade package. The result does mean, however, that non-tradability cannot be accepted as a general explanation for the change in BS export and import shares of the benchmark countries.

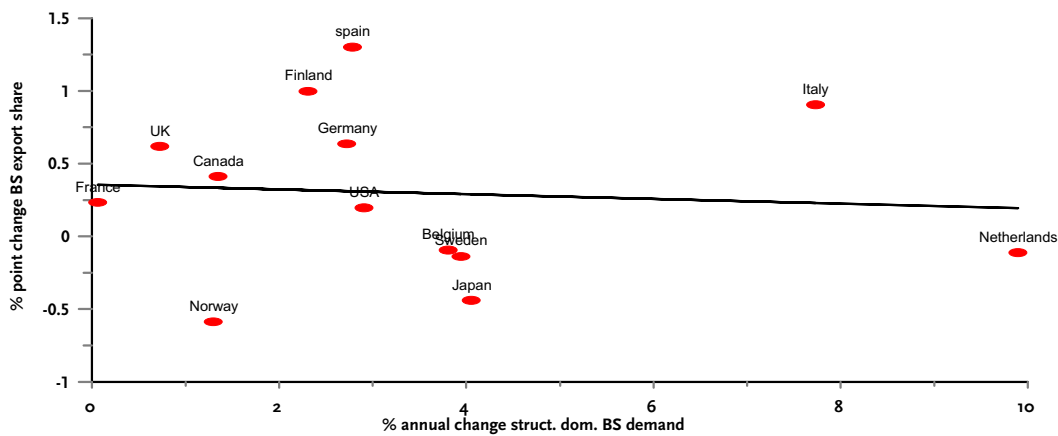
Re: C) Trade liberalisation and BS trade specialisation. Trade liberalisation and trade deregulation may have above-proportional impacts on industries that so far were sheltered from world market competition. The first impact will be on import shares; export shares will follow once the domestic industry becomes more competitive. The sheltered industry will thus become more integrated in international trade. Foreign trade intensity (exports plus imports as

Figure A1 Change in BS import share and structural growth of domestic BS demand, 1991-1996



Regression results: $\text{change}(\text{BS_IMPSHAR}) = -0.42 + 0.15 \text{ change}(\text{STR_DOMBSEMAND})$
 $R^2 \text{ adj.} = 0.05 \quad n = 13$
 (-0.87) (1.28)

Figure A2 Change in BS export share and structural growth of domestic BS demand, 1991-1996



Regression results: $\text{change}(\text{BS_EXPSHAR}) = 0.36 - 0.02 \text{ change}(\text{STR_DOMBSEMAND})$
 $R^2 \text{ adj.} = -0.09 \quad n = 13$
 (1.33) (-0.26)

percentage of GDP) can be taken as a proxy for trade openness.⁹⁸ The hypothesis is that there is a positive relation between the foreign trade intensity of BS industry and foreign trade intensity for the country as a whole. For the group of countries as a whole, a significant and robust

⁹⁸ Foreign trade intensity of the BS industry is the share of combined BS exports and imports in total value added in the domestic BS industry.

positive correlation is found.⁹⁹ This result is consistent with the hypothesis that trade liberalisation has a more than proportional effect on industries like business services that traditionally have been rather sheltered from direct world market competition.

Finally, to conclude the evaluation of alternative explanations for BS trade specialisation patterns, the three aforementioned explanations are combined in a multiple regression framework to test for their combined explanatory power. Table A13 gives the results.

Table A13 Multiple regression results on BS trade specialisation patterns, 1991-1996

Dependent variables (all in % point)	Constant		Explanatory variables:								R ² adj.
			change RCA		change foreign trade intensity of country		structural change in domestic BS demand				
	coefficient	t value	coefficient	t value	coefficient	t value	coefficient	t value			
change BS share in exports	0.22	0.58	-0.004	-0.34	0.04	1.05	-0.02	-0.30		0.17	
change BS share in imports	-0.15	-0.27	0.04	-2.32	0.06	1.16	0.03	0.28		0.32	

Number of countries with full data: 13. Significant coefficients (at 5% level) that also have the expected sign, are shaded.

Data sources: OECD (SVAE, SITS), World Bank (WDI), CBS/CPB (for the Netherlands).

Overall, the coefficients of the explanatory variables are quite low. The change in a country's foreign trade intensity has no independent explanatory power in a multiple regression context. The impact of this variable apparently may be covered already by other variables. The change in revealed comparative advantage only plays a significant role in the explanation of the BS import shares. It also has the correct sign: if a country sees its own RCA in business services deteriorate, it will import more BS from abroad. On the other hand, we do not find a significant influence of an improving RCA on BS export shares. The same holds for structural change in domestic BS demand: it has no significant impact on import or export shares.

⁹⁹ The regression results: $\text{change}(\text{BS_fortradint}) = -0.79 + 0.65 \text{change}(\text{Ctry_fortradint})$. The t -value for the coefficient is 2.68 and the adjusted R^2 amounts to 0.31. The results refer to a group of 15 countries. The correlation remains significant when the changes in foreign trade intensity are normalised with their initial (1991) levels. The regression equation: $A_{BS} = -0.34 + 1.25 A_{CTRY}$ in which A_{BS} and A_{CTRY} represent the percentual change of foreign trade intensity between 1991 and 1996 of, respectively, the BS industry and the rest of the economy. The t value for the parameter is 2.30 and the adjusted R^2 amounts to 0.24. Hence, one per cent change in a country's foreign trade intensity on average generated a 1.25 per cent increase in the foreign trade intensity of the BS industry.

References

- Aharoni, Y., 1993, Globalisation of professional business services, in: Y. Aharoni (ed.), *Coalitions and competition: the globalisation of professional business services*, Routledge, London.
- Anderson, J., 1988, *The relative inefficiency of quotas*, MIT Press, Cambridge MA.
- Baghi-Sen, S. and J. Sen , 1997, The current state of knowledge in international business in producer services, in: *Environment and Planning A*, vol. 29, pp. 1153-74.
- Balassa, B. , 1965, Trade liberalisation and 'revealed' comparative advantage, *The Manchester School*, vol. 33, pp. 99-123.
- Banerjee, A.V. and E. Duflo , 2000, Reputation effects and the limits of contracting: a study of the Indian software industry, *The Quarterly Journal of Economics*, vol. 115, (August), pp. 989-1017.
- Barré, R., 2000, *Knowledge-intensive business services and emerging innovation systems*, draft paper, Annual Conference of the Six Country Programme (May 2000, Utrecht), Observatoire des Sciences et des Techniques, Paris.
- Barrell, R. and N. Pain (eds.), 1999, *Innovation, investment and the diffusion of technology in Europe - German direct investment and economic growth in postwar Europe*, Cambridge University Press, Cambridge.
- Barth, D., 1999, *The prospects of international trade in services*, Friedrich Ebert Foundation, Strategic Planning Department, Bonn.
- Beers, C.P. van et al., 1999, *De gevolgen voor Nederland van directe buitenlandse investeringen*, Onderzoeksreeks nr. 96, IOO BV, Den Haag
- Beije, P., 2000, The role of knowledge-intensive business services in the innovation process of firms, Position Paper, Annual Conference of the Six Countries Programme (May 2000, Utrecht), TNO-STB, Delft.
- Belli, S. and C. Peyroux, 1999), Les <<FATS>>: une nouvelle source d'information sur les investissements directs étrangers dans le secteur tertiaire, *Economie et Statistique*, No. 326-327, pp. 129-37.

- Boddewyn, J., M. Halbrich and A.C. Perry, 1986, Service multinationals: conceptualisation, measurement and theory, *Journal of International Business Studies*, vol. 17, pp. 41-57.
- Braconier, H., K. Ekholm and K.H. Knarvik, 2000, Does FDI work as a channel for R&D spillovers? Evidence based on Swedish data, CEPR Discussion Paper No. 2469, CEPR, London.
- Braunerhjelm, P. and K. Ekholm, 1999, Foreign activities by Swedish multinational corporations: the role played by large European host countries, in: Barrell, R. and N. Pain (eds.), *Innovation, investment and the diffusion of technology in Europe*, Cambridge University Press, Cambridge, pp. 120-42.
- Bruijn-Schintz, H. de and J. Jannink, 1989, Het technologisch kennisverkeer met het buitenland, *Kwartaalbericht De Nederlandsche Bank*, 1989 (2), pp. 43-55.
- Buckley, P. J., 1983, New theories of international investment: some unresolved issues, in: M. Casson (ed.), *The growth of international business*, Allen & Unwin, London, pp. 34-51.
- Buckley, P.J., 1985, A critical view of theories of the multinational enterprise, in: P.J. Buckley and M. Casson (eds.), *The economic theory of the multinational enterprise: selected papers*, MacMillan, London, pp. 1-20.
- Casson, M., 1987, *The firm and the market*, Basil Blackwell, Oxford.
- Clegg, J., 1993, Investigating the determinants of service sector foreign direct investment, in: H. Cox et al. (eds), *The growth of global business*, Routledge, London, pp. 85-104
- Commission of the European Communities, 1998, *The contribution of business services to industrial performance: a common policy framework*, Communication from the Commission to the Council, COM(1998)534 final, Brussels.
- Daniels, P.W., N. Thrift and A. Leyshon, 1989, Internationalisation of professional producer services: accountancy conglomerates, in: P. Enderwick (ed), *Multinational service firms*, Routledge, London, pp. 79-106.
- Dunning, J., 1973, The determinants of international production, *Oxford Economic Papers* vol.25.
- Dunning, J., 1981, *International production and the multinational enterprise*, Allen&Unwin, London.

- Dunning, J.H. and G. Normann, 1987, The location choice of office of international companies, *Environment and Planning A*, vol. 19, pp. 613-31.
- Dunning, J., 1988, *Explaining international production*, Unwin Hyman, London.
- Dunning, J.H., 1989, *Transnational corporations and the growth of services: some conceptual and theoretical issues*, UNCTC Current Studies Series A, No. 9, United Nations, New York.
- Enderwick, P., 1992, Scale and scope of service sector multinationals, in: P. Buckley and M. Casson (eds.), *Multinational enterprises in the world economy*, Edward Elgar, Aldershot, pp. 134-52.
- Ethier, W.J. and J.R. Markusen, 1991, *Multinational firms, technology diffusion and trade*, NBER Working Paper No. 3825, NBER, Cambridge MA.
- European Commission, 1997, *The Single Market Review - Impact on Services: Advertising*, Luxembourg.
- Fosfuri, A., M. Motta and Th. Rønde, 2001, Foreign direct investment and spillovers through workers' mobility, *Journal of International Economics*, vol. 53, pp. 205-22.
- Gras, A., Nieuwsbrief Internationale Diensten, 1997-98, Centraal Bureau voor de Statistiek, Divisie Handel, Transport en Dienstverlening, CBS, Heerlen.
- Greenaway, D. and C. Milner, 1993, *Trade and industrial policy in developing countries: a manual of policy analysis*, MacMillan, London.
- Hertog, P. den, 2000, *Knowledge-intensive business services as co-producers of innovation*, paper presented at Annual Conference of the Six Countries Programme (May 2000, Utrecht), Dialogic, Utrecht.
- Hirsch, S., 1976, An international trade and investment theory of the firm, *Oxford Economic Papers*, vol. 28, pp.258-270.
- Hoekman, B., 1995, *Tentative steps: an assessment of the Uruguay Round Agreement on Services*, CEPR Discussion Paper Series No. 1150, CEPR, London.
- Hufbauer, G. and T. Warren, 1999, *The globalization of services: what happened, what are the implications?*, Institute of International Economics, Washington.

- Hymer, S., 1976 (1960), *The international operation of national firms: a study of foreign direct investment*, MIT Press, Cambridge MA.
- Ianchovichina, E., J. Binckley and Th. Hertel, 2000, Procompetitive effects of foreign competition on domestic markups, *Review of International Economics*, vol. 8 (1), pp. 134-48.
- Julius, D. and J. Butler, 1998, Inflation and growth in a service economy, *Quarterly Bulletin*, Bank of England, November, p. 338-46.
- Karsenty, G., 1999, *Just how big are the stakes? An assessment of trade in services by mode of supply*, paper presented at Services 2000: New Directions in Services Trade Liberalization Conference, Washington DC, June 1-2 1999).
- Kimura, F., 2000, *Globalization and harmonization: the case of accountancy services in Japan*, paper presented at NBER 11th Annual East Asian Seminar on Economics, 'Trade in Services', 22-24 June 2000, Seoul.
- Knickerbocker, F., 1973, *Oligopolistic reaction and the multinational enterprise*, Harvard University Press, Cambridge MA.
- Kox, H., 2000, *Impact of monopolistic competition on productivity and industry structure in business services*, Internal CPB Memorandum III/2000/08, CPB, The Hague.
- Lall, S. and P. Streeten, 1977, *Foreign investment, transnationals and developing countries*, Macmillan, London.
- Mann, M.A., L. Brokenbaugh and S.E. Bargas, 1999, U.S. international services: cross-border trade in 1998 and sales through affiliates in 1997, *Survey of Current Business*, October, pp. 48-95.
- Markusen, J., 1995, The boundaries of multinational enterprises and the theory of international trade, *Journal of Economic Perspectives*, vol.9, pp. 169-89.
- Markusen, J.R., A.J. Venables, D.E. Konan and K.H. Zhang, 1996, *A unified treatment of horizontal direct investment, vertical direct investment and the pattern of trade in goods and services*, NBER Working Paper No.5696, National Bureau of Economic Research, Cambridge MA.
- Markusen, J.R. and K. Maskus, 1999, *Multinational firms: reconciling theory and evidence*, NBER Working Paper No. 7163, NBER, Cambridge MA.

- Markusen, J.R. and K. Maskus, 1999a, *Discriminating among alternative theories of the multinational enterprise*, NBER Working Paper No. 7164, NBER, Cambridge MA.
- Markusen, J.R., Th. F. Rutherford and D. Tarr, 2000, *Foreign direct investment in services and the domestic market for expertise*, NBER Working Paper No. 700, NBER, Cambridge MA.
- McGuire, G., 2000, *Measuring and modelling restrictions on trade in services*, Note by Australian Productivity Commission, reproduced by OECD as document TD/TC/WP, 2000)26, OECD, Paris
- Merchant, K., 2001, India learns language of customer service - call centres serving the US promise a huge export business, *Financial Times*, April 4 2001.
- Ministerie van EZ and Knight Wendling, 2000, *Bedrijfstaktoets 2000: industrieel ontwerp bureaus, ingenieursbureaus, gieterij-industrie, rubber- en kunststofverwerkende industrie*, Ministerie van Economische Zaken, Den Haag.
- Ministry of Trade and Industry, 2000a, *Videnservice i vækst* (Growth in knowledge services), Erhvervsministeriet, Copenhagen
- Ministry of Trade and Industry, 2000b, *Service i forandring* (The changing face of services- Trends and challenges in the Danish Service Sector), Erhvervsministeriet, Copenhagen
- MKB-Nederland, 2000, *Sector zakelijke dienstverlening: een reus met groeipijnen*, Koninklijke Vereniging MKB-Nederland / Fortis Bank, Delft.
- Nguyen-Hong, D., 2000, *Restrictions on trade in professional services*, Productivity Commission, Staff Working Paper, Ausinfo, Canberra.
- OECD, 2001a, *Growth project - draft ministerial paper*, Document DEELSA/ELSA, 2001)5/PART1, April 3rd 2001, Directorate for Education, Employment, Labour and Social Affairs, OECD, Paris.
- OECD, 2001b, *Inward direct investment and establishment in the professional services sector under the OECD Code of Liberalisation of Capital Movements*, Document DAF/FE/INV, 2000)18/REV1, April 4th 2001, Directorate for Financial, Fiscal and Enterprise Affairs, OECD, Paris.

OECD, 2001c, *Assessing barriers to trade in services - The scheduling of economic needs tests in the GATS: follow-up work*, Trade Committee, Document TD/TC/WP, 2001)5, OECD, Paris.

OECD, 2001d, *Trade and regulatory reform: insights from the OECD country reviews and other analyses*, Trade Committee, Document TD/TC/WP, 2000)21/REV1, OECD, Paris.

OECD, 2001e, *Programme of work and budget for 2002*, Directorate for Financial, Fiscal and Enterprise Affairs, Committee on Capital Movements and Invisible Transactions, Document DAFFE/INV, 2001)16, OECD, Paris.

OECD, 2000a, *Competition in Professional Services*, Document DAFFE/CLP, 2000)2, OECD, Paris.

OECD, 2000b, *Manual on Statistics of International Trade in Services*, Draft 13 June 2000 (Commission of the European Union, International Monetary Fund, OECD, United Nations, WTO, Document STD/NA/SERV(2000)1, OECD, Paris.

OECD, 2000d, *Foreign Affiliate Trade in Services (FATS) statistics - how can we make progress with the data?* Statistics Directorate, Document STD/NA/SERV(2000)7, OECD, Paris.

OECD, 2000e, *Quantification of the costs to national welfare of barriers to trade in services: scoping paper*, Trade Committee, Document TD/TC/WP(2000)32, OECD, Paris.

OECD, 2000f, *OECD Employment Outlook*, June 2000, OECD, Paris.

OECD, 1999a, *Internationalisation of services - Results of the survey of the activity of foreign affiliates in the services sector: an initial assessment*, Directorate for Science, Technology and Industry, Industry Committee, Document DSTI/EAS/IND/SWP(99)14, OECD, Paris.

OECD, 1999b, *Links between direct investment and trade: short and long-term effects*, Directorate for Science, Technology and Industry, Industry Committee, Document DSTI/EAS/IND/SWP(99)15, OECD, Paris.

OECD, 1999c, *Measuring globalisation: the role of multinationals in OECD economies*, 1999 edit., OECD, Paris.

OECD, 1999d, *Strategic business services*, OECD, Paris.

OECD, 1996, *International trade in professional services - assessing barriers and encouraging reform*, OECD, Paris.

Roberts, J., 1999, The internationalisation of business service firms: a stages approach, *The Services Industries Journal*, vol. 19 (4), pp. 68-88.

Rugman, A., 1981, *Inside the multinationals: the economics of internal markets*, Columbia University Press, New York.

Rugman, A., 1987). Multinationals and trade in services: a transaction cost approach, *Weltwirtschaftliches Archiv*, vol. 123 (4), pp. 651-67.

Shatz, H. and A.J. Venables, 2000, The geography of international investment, in: G.L.Clark, M.Feldman and M.S.Gertler (eds.), *The Oxford Handbook of Economic Geography*.

Swedish Federation of Architects and Consulting Engineers, 1999, *The Sector Review*, Nov. 1999 (<http://www.ai-foretagen.se/english/sectorr.htm>).

UNCTAD, 1997, *World Investment Report 1997 - Transnational companies, market structure and competition policy*, United Nations, New York.

Verkade, E., 1999, Onderzoeksvoorstel voor de internationaal vergelijkende bedrijfstakstudie zakelijke dienstverlening, Memo #14.99, Centraal Plan Bureau, Den Haag.

Vernon, R., 1966, International investment and international trade in the product cycle, *The Quarterly Journal of Economics*, vol. 80 (2), pp. 190-207.

Vernon, R., 1974, The location of economic activity, in: J.H. Dunning (ed.), *Economic analysis and the multinational enterprise*, Allen & Unwin, London.

Vernon, R., 1977, *Storm over the multinationals: the real issues*, Harvard University Press, Cambridge MA.

Whichard, O.G., 1999, *Measurement, classification and reporting of services activities: an international perspective*, mimeo, Bureau of Economic Analysis, US Dept. of Commerce, Washington.

WTO, 1999a, *Recent developments in services trade - overview and assessment*, Background note by the Secretariat, Council for Trade in Services, S/C/W94, World Trade Organization, Geneva

WTO, 1998a, *Advertising services*: background note by the Secretariat, Council for Trade in Services, S/C/W74, World Trade Organization, Geneva

WTO, 1998b, *Accounting services*: background note by the Secretariat, Council for Trade in Services, S/C/W73, World Trade Organization, Geneva

WTO, 1998c, *Legal services*: background note by the Secretariat, Council for Trade in Services, S/C/W43, World Trade Organization, Geneva.

Abstract

The report analyses the exposure of business services industry to foreign competition, either through trade or through foreign direct investment. Internationalisation of the Dutch business services industry is compared to the situation in the USA and a number of EU countries.

The theoretic framework offers a micro-foundation for internationalisation decisions by individual firms, in particular the choice between exporting, licensing one's product to an independent foreign supplier, and setting up own production in a foreign subsidiary. The framework accounts for the importance of intangible assets in competition process, as is found in many knowledge-intensive branches of the business services (BS) industry. The presence of intangible assets strengthens the urgency of having a local presence in foreign markets. The theory predicts that the exposure of BS industry to foreign competition will increasingly get the form of direct investment instead of imports or licensing agreements. The theoretic framework stood up quite well against the empirical data in the BS industry. The growth of domestic BS markets correlates negatively with the import share in total supply and positively with the share of foreign subsidiaries in domestic supply.

National regulations have a substantial impact on trade and direct investment patterns in the BS industry. Regulatory interventions either operate directly through laws or indirectly, by delegating the regulatory powers to national branch associations. This is particularly important for knowledge-intensive BS branches. Foreign BS suppliers often have to comply with several additional regulations that function as non-tariff barriers to national BS markets. Strong differences exist between countries as to the strictness of market regulations for BS industry. The Dutch and UK markets for business services are among the most liberalised ones. Large net welfare gains for national economies can be achieved by allowing more competition from foreign BS suppliers: technology and knowledge spillovers from abroad, better services quality, more competition in domestic BS markets, scale-related cost advantages, and cheaper intermediary BS inputs for client industries. Buyer protection for some knowledge-intensive professional business services can be shaped in a more non-discriminatory way than is the case now. On balance, removal of remaining barriers for imports of BS products and foreign subsidiaries is expected to have positive net welfare effects. Dutch BS firms are in a good position to benefit from future deregulation and liberalisation of BS industry in other OECD countries.