Name: Enrolment No:	UPES

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May, 2019
Course:International Business CC:INTB 7002
Semester: II
Programme: MBA –IB

Time: 03 hrs. **Max. Marks: 100**

Instructions: Read carefully all the instructions in all sections before you answer

SECTION A
Answer all questions

S. No.		Marks	CO
Q 1	What are the different forex components?	**2**	**CO1**
Q2	Mention the regulatory institutions of FEMA	**2**	**CO2**
Q3	What do you mean by "Tabling a Proposal" in UK and US?	**2**	**CO2**
Q4	Give few examples of non-verbal languages	**2**	**CO2**
Q5	How manager's action can reduce risk in internal business?	**2**	**CO3**
Q6	What is an embargo?	**2**	**CO4**
Q7	Give an example of sanctions	**2**	**CO3**
Q8	Distinguish between common law and code law	**2**	**CO3**
Q9	Who contributed the Product Cycle Theory of International Trade?	**2**	**CO3**
Q10	What are the two important evolving challenges in forex	**2**	**CO1**

SECTION B
Answer any four

Q 1	Analyse the export process flow	**5**	**CO4**
Q2	Distinguish between international business, international trade and international marketing. What is meant by globalization?	**5**	**CO1**
Q3	Analyse the functions of WTO in regulating International Trade	**5**	**CO3**
Q4	What are the different elements of culture? Give examples of each elements	**5**	**CO4**
Q5	Analyse the proactive and reactive motivations of International Business	**5**	**CO3**

SECTION-C
Answer any two questions

Q 1	Discuss the strategic indications in services industry. What are the role of services in the global economy?	**15**	**CO3**
Q2	Analyze the different entry strategies in International Business	**15**	**CO4**
Q3	Critically discuss the modern theory of international trade with diagrams and examples. How far is it applicable in explaining international trade in present context?	**15**	**CO4**
SECTION-D			
Q1	IN the light if the below case study analyze how president of the LTGIG, Mr. Bounma has actively participated in in-country and regional workshops on the issues and challenges related to trade in textiles and garments after 2005 and significantly contributed to the government's prime objective of poverty alleviation through job creation and earning of foreign exchange	**15**	**CO4**
Q2	Examine the impact of quota abolition on Lao's textile companies. How garment companies in Lao's faced cost disadvantage after 2005 and what the impact?	**15**	**CO4**

Laos: The Textile and Garment Industry in the Post-ATC Era

I. Overview

The WTO Agreement on Textiles and Clothing (ATC) set up a transitional mechanism in 1995, with a view to phasing out quotas for trade in textiles and clothing by the end of 2004. Even though the total global imports of textiles and clothing will expand, competition is also likely to increase among many garment-exporting countries around the world. It is expected that textile and garment companies in medium- to high-cost countries will reduce their manufacturing production. In contrast, those in low-cost countries with a strong competitive advantage will expand their production and export capacities to become preferred suppliers and to take advantage of liberalization. Lao textile and garment companies will be affected at different levels depending on their competitive capacities. In order to maintain its market shares or reduce losses, the garment

industry needs to implement a product diversification strategy with the introduction of products in the medium to higher market segments and develop sufficient production inputs. Laos needs to develop modernized production facilities, better upstream industries (spinning and weaving) and well-trained workers to be prepared for trade liberalization. Support from the government is crucial, in particular on market access negotiations and trade facilitation. Nevertheless, a lack of capacity in terms of budget and expertise is the main constraint in the process.

II. The problem in context

The textile and garment industry is of great importance to the Lao economy. Currently, the industry comprises ninety-six factories and employs more than 25,000 workers. In 2003, garment exports, valued at US$115 million, accounted for approximately a third of total exports, second to electricity. Laos exports ready-made garments to forty-two countries. As one of the forty-nine least developed countries, Laos is granted duty-free and quota-free market access to certain developed countries under the generalized system of preferences (GSP). However, the garment industry benefits very little from the GSP due to strict rules of origin, particularly related to local content requirements. Garment companies in Laos mostly depend on imported fibre, yarn and fabric for assembling as finished garments that are then re-exported.

The phasing out of quotas at the end of 2004 will lead to a dramatic increase in exports from large developing countries such as China and India. This increase could have significant implications for smaller least developed countries including Laos. One of the expected results is price competition. It is expected that the price of textiles and clothing will come down by around 20-25% when the quota abolition takes its full effect. According to Mr Bounma, the president of the Lao Fashion Garment Co., the effects of price reduction due to increased competition can be felt even now: ‘Last year the price of a polo-shirt that we

produced for a client in Hong Kong was US$5.50 per piece, but last week we received the order with a price offer of US$3.50.'

This is a big challenge for garment factories in Laos, where advantages in low wage costs may no longer exist. Even though the wages are relatively low workers' productivity is also low, due to the lack of proper skills training and development. Garment manufacturers in Laos have become progressively highly concentrated on low-value-added products. The exporters have market shares in selected products that are by no means in the lowest price quartile in the European market. Lower prices and better quality garments from various supply sources are expected to increase when the ATC comes to an end. Some locally owned garment factories in Laos are manufacturing-oriented and work on a CMT (cut, make and trim) basis or use sub-contractors, mainly via traders in Thailand, Singapore and Hong Kong. The working procedure is such that brand-name sportswear is designed by the brand owners, for example in Europe. The orders are placed with a Hong Kong-based representative office, which will then make contact with garment suppliers in the region including China, Cambodia, Laos, Thailand and Vietnam. If the order is for 5 million pieces, for instance, it will be divided up according to each country's supply capacities. Suppliers in Laos are more likely to receive the smallest allocation in the light of their limited production capacities in comparison with those in China and Vietnam.

The other possible problem is preference erosion. In the past, apart from quota limitation, exporters from countries, which are not GSP beneficiaries, have to pay 12-14% import duties. This means that Lao exporters used to have the advantage of cost saving of more than 10% over exporters from other countries for categories of garments exported under the GSP. After 2005, this advantage for Lao garment exporters will be minimized. In addition, being a land-locked country, Laos faces the transportation issue; most goods are transited via ports in Bangkok or Danang. Lao garment suppliers are thus at a clear disadvantage, the transport costs for Laos being relatively high compared with its neighbours. Mr Bounma explained that 'It costs us around US$1,200 for a shipment of standard

containers, while the exporters in Vietnam pay only US$250. It is estimated that taking both the preference erosion and transport costs into account, the cost-saving gap will reduce from 12-14% to only 3-5%.'

The preferred suppliers are those who will be able to take advantage of lower wages, higher labour productivity and quicker response to demand. In Laos, the labour productivity is generally low — even lower than in neighbouring Vietnam. Consequently, low productivity affects the added value of production and the capacity to diversify outputs. Given comparable clothing quality and marginal price difference, importers tend to prefer the supply sources that offer more convenience. This may be due to a cheap and large pool of labour. Easy access to sea transportation is also another crucial factor because it will affect the lead-time of supply; Laos takes longer to transport goods via neighbouring countries to seaports. From the point of view of the garment industry, the government should streamline import and export procedures to allow for fast importation of raw materials as well as quick clearance of finished garment exports. This will help to offset the disadvantage of location.

The Lao textile and clothing industry will face fierce competition in its export markets, particularly the European Union (EU), its main market for garments. Laos is not yet a member of the WTO and thus its textile and clothing trade is dependent on bilateral trade arrangements with its trading partners; membership of the WTO would give Laos its necessary predictable market access to major markets. In addition, Laos is a relative newcomer, having for example concluded a bilateral trade agreement with the United States only at the end of 2003, while its neighbours Vietnam and Cambodia have had access to the US market since 1994 and 1997 respectively.

III. The players and their roles

The key player in this case study is the Lao Fashion Garment Co., a locally owned company established in the capital, Vientiane. It employs some 230 workers, most of whom are women in their twenties, in the factory, which, equipped with

141 machines, is relatively small. Lao Fashion Garment mainly produces and exports polo shirts, T-shirts, sweaters, jackets, brassieres and knitted items to the European market. Its performance has been reasonably successful so far. The management is aware of possible competition in the liberalized trade in textiles and garments after 1 January 2005; Mr Bounma commented that, 'We are a relatively small company which has a production capacity of 720,000 pieces per year. Lao Fashion Garment imports most of its raw materials from other countries, mainly from China and Chinese Taipei. Like most garment companies in Laos, we receive production orders from overseas partner companies in Hong Kong and Thailand.'

The textile and garment sector in Laos is composed of ninety-six factories of which fifty-seven are producers and/or exporters. Textile and garment companies can be divided into four categories, foreign direct investment subsidiaries, joint-venture companies, (locally owned) medium-sized companies and small-sized factories working as sub-contractors. There are different levels of awareness among these companies in relation to quota abolition after 2005. The foreign direct investment firms and joint-venture companies form the groups who are more likely to feel least impact. They are relatively aware of what will happen after the quota regime expires, and many of them are preparing themselves for the upcoming increased competition. They have undertaken in-house training programmes to improve labour productivity and to increase their product diversification capacity. Some companies are also looking for cheaper sources of imported raw materials. In addition, the foreign subsidiaries and joint-venture companies also have good marketing channels as a result of their connection with parent companies or foreign-based partner companies abroad.

Lao Fashion Garment falls under the third category of company that is a locally owned factory. Producers in this category are in the group that is more likely to face the biggest challenges after 1 January 2005. As a local factory receiving orders from middleman firms overseas, Lao Fashion Garment cannot make direct

contact with importers and therefore it only works on a CMT basis. Overseas companies are responsible for marketing its exports in Europe.

In general, the most adversely affected category of garment companies is formed by the locally owned factories, which are the sub-contractors for the first three categories. Given the fact that the companies in these categories are trying to cut down their production costs, one of the consequences will be to give up outside production lines and carry out all production activities onsite. As a result, sub-contractors may no longer be needed.

The Lao Textile and Garment Industry Group (LTGIG) has played a very important role in raising awareness in the garment and textile industry concerning quota abolition. The group held many workshops and invited key speakers from international organizations to talk to local businesses about the future of the world trade in textiles and garments after 2005 and its implications for the industry. 'Much more needs to be done to create a clear understanding of the possible negative impacts of the quota abolition and what should be an appropriate response from the individual company itself and the industry as a whole', commented Mr Bounma, who is president of the LTGIG.

The Lao National Chamber of Commerce and Industry (LNCCI) has worked hard to lobby the Ministry of Commerce, which is dealing with trade policy, trade negotiations and export promotion. Mr Bounma added that 'Equally important, the chamber of commerce is a business association which addresses the government with their concerns and seeks support to help the garment factories to overcome the problems.' The ministry has a direct responsibility for the promotion of exports, but it does not have sufficient funds to allow it to do so. This is unfortunate, as promotional support by government is one of the areas of support to the industry permitted under WTO regulations. This support is nearly always found in competing countries as the catalyst for helping small- to medium-sized garment companies, to move into direct exports in particular. A senior official in the Ministry of Commerce explained that 'In most of the newly

developing countries, the government provides export promotion support to their garment producers. It is doubtful whether the industry in Mauritius would have reached almost US$1 billion exports if there were no promotional support from the government. Similarly, this can explain why garment suppliers in Pakistan, India, Madagascar and Malaysia are much outperformed'.

IV. Challenges faced and the outcome

In general, the Lao textile and garment industry is not in the right position to face the coming competition. It is expected that global exports of textiles and garments will expand when the quotas are abolished. Lao garment companies are likely to face a considerable level of competition from larger economies such as China, Vietnam, India and Pakistan, which have the comparative advantage of a large pool of cheap labour and the production of high-quality garments. Mr Bounma said that 'In recent years, Lao Fashion Garment has received fewer and fewer orders compared with the late 1990s', expressing his concern about his own factory. This has become a sign of the keen competition in the world textile and garment market. The end of 2004, when the quota system under the ATC was terminated and the textile would realize the full effects and garment trade would be fully integrated into the WTO framework. Mr Bounma comments, 'Consequently, the CMT work is reducing and will not be available in the future. This would have a great impact not only on my own factory but it would also affect the whole economy of Laos, in particular the textile industry that employs more than 25,000 workforces, accounting for 20% of the total population.' This critical likely situation has obliged him to think over and over again what he should do in order to keep his factory competitive. The two burdens that he bears have inspired him to come up with some measures that will be applied in his own factory and offer this advice to the industry as a whole: 'The government should provide training courses to match the needs of the industry and improve the bureaucratic procedures to facilitate the industry to manufacture and export efficiently.'

As the owner of the Lao Fashion Garment as well as being the president of the LTGIG, Mr Bounma has some advantages over other domestic factories, as he is aware of what the Lao garment industry faces after the quota abolition. Nevertheless, he is still not very sure about the actual negative impacts. When the group organizes brainstorming workshops for responsive solutions, local factory participation is very low compared with foreign-owned or joint venture companies. The business owners hardly realize the importance of consultations and teamwork in order to discuss their concerns and find mutual solutions. Some factories usually send an office clerk or an accountant to attend these workshops. Mr Bounma emphasized, 'You need to know and understand the problems yourself in order to come up with a clear plan of action to deal with what is expected to be faced in the future.' It is more likely that the quota abolition will put many small garment factories that are sub-contractors out of business if nothing substantive has been undertaken to prevent it. Given the fact that most garment factories in Laos rely heavily on orders from third parties, importers will tend to choose those suppliers who offer them the best terms and conditions. The quality that Lao garment factories can supply may be comparable and the price may be a little cheaper, but the importers will order from the suppliers who are most convenient to deal with. Hence, small suppliers in Laos can do little more than face reality and, in the worst case, may have to close down their factories.

On the other hand, the government authorities are not very aware of the impact of global competition, which requires short lead times, low prices, good-quality products and good-quality services. The garment factories expect to receive support from government authorities, particularly to provide timely import-export clearance. One area of support for productivity enhancement in the Lao garment industry is improvement in import procedures of raw materials and prompt service for the export of ready-made garments. The geographical constraint alone offers a sufficient disadvantage for Lao exporters; they should not be brought down by additional man-made difficulties. 'We would like to see the government sector working harder to improve market access for Laos as in

other countries. For example, in Thailand the Ministry of Commerce and trade representatives abroad are working with key agencies to negotiate market access and make contacts for business partnerships', Mr Bounma commented. One of the biggest disadvantages for Laos, in comparison with Cambodia and Nepal, of not being a member of the WTO is that Laos is very reliant on bilateral market access. 'We are not concerned about the import tariffs because they may not come down very much after the end of the Doha Round, but the real threat for us is import quotas', added Mr Bounma. After the textile and garment trade is brought within the multilateral trade framework, any quantitative restrictions are forbidden among members. Without WTO membership, Laos has to live with bilateral trade arrangements which may be abused by importing countries even though they are WTO members.

The Lao garment industry's productivity is relatively low in comparison with its competitors due to the lack of training, skills, labour and management. The difficulties in training workers are diverse. Most factory workers are women who may finish high school and then come to the city to find jobs. The garment factories have to train them completely on site. It is indisputable that the wages in Laos are low, but the workers also have low productivity. Lao companies are only producing low-grade products.

The other challenge for Lao Fashion Garment is the lack of marketing strategies. The company is manufacturing-oriented with a passive selling approach, waiting for production orders from representative companies overseas, for example in Hong Kong or Thailand. This may be acceptable for foreign direct investment companies as they can have transfer pricing with parent companies. In contrast, it is an increasing problem for some joint ventures and certainly for 100% Lao companies such as Lao Fashion Garment.

Even though Laos is qualified under the GSP to export to many developed markets such as the EU, Japan and Canada, most garment factories are not able to take full advantage of this preferential market access. Most of Lao Fashion

Garment's items are not exported under the GSP to the EU market. Mr Bounma commented that 'Due to the lack of domestic upstream industries, we import most of our raw materials such as fibre, yarn and fabric from China and Chinese Taipei.' Imported materials account for approximately 70% of total production costs and in turn these constitute quite a high proportion of the overall production costs. Due to increased competition as a result of the quota abolition, imported material cost components may not be reduced to the same extent as the garments' price reduction. Labour costs will be cut instead and in some cases the profit margin will decrease, both of which are part of the local 'value added'. The reduction in domestic value addition is a threat, especially for those who export under ASEAN cumulation rules of origin. In order to fulfil the GSP requirements of the EU, garment factories in Laos need to have local contents worth more than 50% of the total production costs.

In addition to being a non-WTO member, Laos has not yet enforced normal trade relations (NTRs) with the United States. Even though NTRs were recently rectified, many internal procedures for their effective implementation are needed. For Lao Fashion Garment and the garment sector generally, it could take six months or more to actually be able to export to the US market. In the next steps, the Lao Textile and Garment Industry Group in collaboration with the government will need to work hard to negotiate for market access for each category of garments. After Cambodia reached its bilateral trade agreement with the United States in 1997, garment exports doubled within a few years. Currently, Cambodia exports over 70% of garments to the United States and the rest go to the European market. When the ATC is ended and textile and garment trade is fully integrated into the WTO framework, the benefits of having a preferential bilateral market access may not be that great. Hence, after being granted the NTRs, the immediate positive effects on the Lao garment industry cannot be readily forecast. If Laos had had the NTRs in the last seven to eight years it would have been very useful.

For the Lao garment, industry there is another disadvantage for not being able to access the US market. US buyers tend to make larger orders compared with those from the EU market. Receiving bulk orders do have economies of scale and enhance the expertise of the workers. Small quotas disrupt improvements in workers' skills. They start to become familiar with certain production settings and their productivity rises. Then, suddenly, they have to learn new skills and adapt to new settings. Progress in labour skills may take some time.

V. Lessons for others

The success of the industry during the 1990s demonstrated that it can be a significant contributor to the government's prime objective of poverty alleviation through job creation and earning of foreign exchange. For garment factories, CMT work is not sustainable and will not be available in the future. To solve these problems, strong marketing activities, as a means of having direct contact with retail buyers, are needed. Improvement in labour skills and productivity in the industry is also a key to helping Lao garment exporters stay competitive in importing markets.

Being the president of the LTGIG, Mr Bounma has actively participated in in-country and regional workshops on the issues and challenges related to trade in textiles and garments after 2005. 'Creating public awareness among locally owned garment factories, including the sub-contractors, would be an activity that needs to be undertaken immediately', commented Mr Bounma, adding that 'The Ministry of Commerce should actively work in collaboration with the Chamber of Commerce and Industry.' In order to minimize the possible negative impacts on the Lao garment industry, it is necessary for the government to make a comprehensive assessment of the potential adverse effects of quota abolition and to have a clear policy response.

Apart from raising awareness, support from the government authorities is a crucial factor. From interviews conducted with some garment factories, the

general consensus is that the current legal framework should be more supportive of business operations. One example is that the government could review and improve the existing labour law. Flexible labour law is needed to allow for garment factories to compete with those in other neighbouring countries. Overtime work for workers is limited to only 30 hours per month. In addition, female workers constitute far the largest share of the workforce in the textile and garment industry but they are not allowed to work after 10 p.m. This is not enough for the factory to produce on time when bulk orders are received.

Talking about the difficulties that the textile and clothing sector in Laos has encountered, Mr Bounma had expressed some concerns resulting from his own experience and through discussions with managing directors of various other garment factories, whether wholly foreign owned, joint-venture or Lao-owned companies: almost all the companies have difficulties in developing mechanical skills, and all kinds of management skills. The result is that unit costs of production are higher than necessary, quality is inconsistent, orders are delayed and material utilization is excessive. Therefore, he suggested that the government works together with the industry to create the appropriate types of vocational training institutes in Laos.

Besides, the government and the industry must work closely together to reach mutual understanding of others' difficulties. Mr Bounma emphasized that the government should negotiate bilateral agreements in order to obtain an extension to the present terms of preferential access to the world's important clothing importing markets, especially the EU, Norway and the United States. He commented further that the government should also speed up its WTO accession procedure, which will help to extend the market access for Laos on a multilateral basis. The WTO is a rule-based organization and membership will mean that Lao exporters will not run up against the risk of being discriminated against by any particular importing countries.

A regional forum to address the issue collectively is considered to be one of various means available to draw the attention of the garment importing countries. That was the view of Mr Bounma after coming back from the sixth ASEAN Federation of Textile Industries (AFTEX) meeting in mid-November 2004 in Hanoi, Vietnam, when he explained, 'I fully agreed with all the positive measures that came out from the meeting and will be submitted to the ASEAN economic ministers for adoption.' He also emphasized that there are some measures that the Lao government should undertake immediately, namely eliminating non-tariff barriers to facilitate intra-ASEAN inputs and securing the recognition of ASEAN cumulative rules of origin in all free trade area negotiations. 'The establishment of skill training, design and merchandizing centres to build capacity for the Lao garment factories will also help the Lao textile and garment industry overcome the mounting challenges', added Mr Bounma.

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Time: 03 hrs. **Max. Marks: 100**

Instructions: Read carefully all the instructions in all sections before you answer

SECTION A
Answer all questions

S. No.		**Marks**	**CO**
Q 1	Give two examples of capital account transactions	**2**	**CO1**
Q2	What do you mean by "Repatriate to India"	**2**	**CO2**
Q3	What are the two principles of FEMA?	**2**	**CO2**
Q4	Mention two important characteristics of culture	**2**	**CO2**
Q5	What is a change agent?	**2**	**CO3**
Q6	Why consortia is formed?	**2**	**CO4**
Q7	Mention two important problems in services trade	**2**	**CO3**

Q8	What is an embargo?	**2**	**CO3**
Q9	Given an example of common law and code law	**2**	**CO3**
Q10		**2**	**CO1**
SECTION B **Answer any four**			
Q 1	Distinguish between Balance of Payments and Balance of Trade	**5**	**CO4**
Q2	Distinguish between high context and low context culture	**5**	**CO1**
Q3	What are the different types of risks in international business? How these risks can be managed?	**5**	**CO3**
Q4	Discuss the functions and objectives of WTO.	**5**	**CO4**
Q5	Analyse the barriers in services trade	**5**	**CO3**
SECTION-C **Answer any two questions**			
Q 1	Analyse all the international entry strategies	**15**	**CO3**
Q2	Analyse the reasons for replacing FERA by FEMA. Discus the provisions of FEMA	**15**	**CO4**
Q3	Discuss the strategic indications in services industry. What are the role of services in the global economy?	**15**	**CO4**
SECTION-D			
Q1	In the light of the below case study discuss the reasons for and implications of growing trade between China and Netherlands	**15**	**CO4**
Q1	Examine the applicability of comparative cost advantage theory of international trade in explaining the trade relations between China and Netherlands. Also analyze the implications transaction cost theory	**15**	**CO4**

Trade between China and the Netherlands

I. Introduction

Trade between China and The Netherlands provides a topical example of the recent trend of globalization. China's economy has been growing prodigiously with about 10 per cent per year in the last three decades[1]. This growth has benefited much from the world wide fragmentation of production where parts of the production chain have been moved to low cost countries. The Netherlands, as medium sized open economy, has a long tradition as a trading nation and, in that respect, acts as a gateway to Europe (Den Butter, 2012). The

two different but complementary economies provide a good example of the increase in trade flows that cannot be explained by traditional trade theories. In this paper, we explain this trade flow through comparative advantages in keeping transaction costs low. Transaction costs are all costs necessary to induce a transaction, including search, contracting and monitoring costs (Den Butter, 2012; for a survey of definitions and measurement of transaction costs). From this transaction cost perspective, the worldwide fragmentation of production can be seen an example of increasing specialization in tasks rather than in products. Some countries may develop great skill in specific tasks and thus gain a comparative advantage based on these tasks rather than on actual products. Other countries, with The Netherlands as example, may be endowed with specific skills to organize tasks and therefore have a comparative advantage in orchestrating production and in distribution.

This paper argues that this phenomenon can explain the fast growth in trade between The Netherlands and China. In order to illustrate this argument the composition and evolution of Dutch China trade is compared with China's trade with its main partners. Trade statistics show that Dutch China trade has been growing significantly faster than trade between China and most of its top 12 partners. This excess growth is too large to be explained by the traditional Ricardian view on trade. In addition, when looking at the composition of Dutch China trade, we find no support of the Ricardian view. China's export to The Netherlands seems to be too high tech to be explained by its natural endowment of labour. Therefore, the main argument of the paper is that the Dutch have in fact outsourced tasks such as assembly and production to China and other Asian countries, while China has been outsourcing distribution and trade management activities to The Netherlands. These findings have some important implications for policies on trade and innovations. We propose that knowledge of and investments in the Dutch orchestration and distribution skills is key for the Dutch economy and future welfare. Policy should focus more on investments in innovations that reduce transaction costs instead of traditional R&D investments. For China, policy implications include increasing innovation capability and the improvement of institutions like the educational system, working conditions and the ability to leverage existing knowledge. China's competitiveness in assembly may be at risk given the negative media attention to Foxconn and increasing wages.

The remainder of this paper is organized as follows. Section II discusses trade and transaction costs and the make or buy and location decisions in offshoring. Section III explains the major aspects of trade between China and The Netherlands, and shows that

trade growth between these countries has been relatively fast. Section IV concludes and discusses policy implications.

II. Trade and transaction costs

The distinctive feature of transaction cost economics is that it challenges the paradigm of frictionless trade. Trade involves considerable transaction costs (or trade costs) which set a limit to the amount of trade otherwise expected by differences in comparative advantage (Trefler, 1995). Here, transaction costs can be seen as all costs market participants make in exchanging goods, services and ideas. This definition encompasses direct costs like tariffs and transportation costs as well as indirect costs like search, contracting and monitoring costs. Coase (1937) already showed, the existence of transaction costs is key to understand the governance structure of firms. Coase pointed out that if the market mechanism freely coordinated the efficient allocation of production factors, firms would not exist. However, coordination costs urge firms to make a decision whether to coordinate through their hierarchy or through the market. This decision determines optimal firm size where the marginal costs of allocation through the market are equal to the marginal costs of allocation within the hierarchy. In essence, Coase describes what is today known as the "make or buy" decision of firms. Williamson (1998) extended Coase's work by proposing that production is also an organizational problem rather than just a technical one. For that reason, it is necessary to open the "black box" of the production function of the traditional theory of economic growth. In their survey of recent developments, Antràs and Rossi-Hansberg (2009) advocate to do so by combining elements of production theory and trade theory with the theory of industrial organization. They indicate that not only the size of the production factors and their rates of substitution are important to explain differences in production and comparative advantages, but that also the organization of the production process should be made endogenous.

Transaction costs have started to play an even bigger role in today's economy due to globalization. In this perspective, globalization is the worldwide trend of the increased unbundling and fragmentation of production processes. Instead of making a large part of a certain product within a firm, fragmentation implies that most parts of the product are subcontracted to (international) parties and bought via the market. The firm itself then essentially becomes an orchestrator of production rather than a producer itself.

Given the increased fragmentation of production, international trade has become more and more a trade in tasks rather than in products component parts of products (Grossman and Rossi-Hansberg, 2008). In this vein Grossman and Helpman (2003) consider the afore mentioned "make or buy" decision in an international context. They argue that the classical dichotomy to make or buy is too simplistic to explain current patterns in international trade. Helpman (2006) shows that this decision has two dimensions, namely geographical location and ownership structure [2]. Firms must simultaneously choose whether to outsource (the ownership dimension) and whether to offshore (the geographical dimension). This leads to four possibilities; in-house production in the home country (insourcing), subcontracting input production to an external party in the home country (outsourcing), producing the inputs in-house through a subsidiary in a foreign country (in-house offshoring) or subcontracting input production to an external party in a foreign country (outsourced offshoring).

Given that a firm decides to move production (or parts thereof) to a foreign country (the "location decision"), it then has to decide whether to keep this production in-house or to outsource to an external party (the "make or buy" decision). From a transaction costs perspective, the latter decision depends vitally on the asset specificity of the traded inputs. Asset specificity refers to the extent to which the value of a product is greater within a specific trade relationship than outside it (Nunn, 2007). Nunn illustrates asset specificity by the example of an investment made by an input supplier (the seller) that produces a customized good for a final good producer (the buyer). When the customization calls for relationship-specific investments, the buyer can "hold up" the seller when contract enforcement is imperfect. Namely, the buyer can go back on the initial agreement by paying a lower price for the customized good after the relationship specific investment has been made. Thus, as assets become more relationship specific, the risk of opportunistic behaviour increases, which means that the costs of contracting increase more than the costs of vertical integration (Klein *et al.*, 1978). In such a situation, one should expect firms to internalize these transaction costs through vertical integration, or to use an intermediary (Ahn *et al.*, 2011).

In practice, this vertical integration becomes apparent through foreign direct investment (FDI). The off shoring firm buys a foreign firm, and then imports intermediate inputs from this subsidiary. There is no consensus though on whether FDI is positively or negatively related to trade (Hyun and Kim, 2010). FDI can lead to higher trade when it has a vertical nature or lower trade when it has a horizontal nature. In the former, firms buy foreign

subsidiaries within their value chain and import cheap intermediates from them (so called intra firm trade). In the latter, firms buy similar firms (competitors) in foreign countries and resell their products via their subsidiaries directly to the foreign market, thereby reducing exports to the foreign market (so called intra industry trade). Overall, the literature suggests that trade between economically similar countries (e.g. developed countries) is driven more by horizontal FDI (Antràs and Yeaple, 2013), while trade between developed and developing countries is driven more by vertical FDI (Antràs and Yeaple, 2013; Kang, 2012; Chen *et al.*, 2012).

Trade in tasks and the organization of production

As mentioned before, with contemporary fragmentation of production and international outsourcing, comparative advantages in the Ricardian sense no longer relate to finished products and services, but rather to a trade in tasks. From that perspective Grossman and Rossi-Hansberg (2008) present a model for the determinants of international trade, which makes an explicit distinction between trade in goods (the traditional approach to model international trade) and trade in tasks. In this model, production involves conducting a continuum of "tasks". Different economies are now not trading in finished goods, but it is the tasks, or sub-sets of the production process, which are tradable. Some tasks may require high-skilled labour input, while other tasks require low-skilled labour or even another factor input like capital or different categories of labour.

The special feature of the trade in tasks model is that when certain tasks are moved abroad, this is done in all industries. For example, when low-skill tasks are moved abroad, this is done both in the industry which is intensive in low-skilled labour and in the industry which is intensive in high-skilled labour. Therefore, trade in tasks will even occur when there are no differences in relative endowments. This kind of trade is not explained by the traditional Heckscher-Ohlin framework. The trade in tasks model thus successfully links trade and transaction costs to Trefler's (1995) "missing trade puzzle" (Baldwin and Robert-Nicoud, 2010).

Figure 1(a) and (b) shows the transition from trade in finished products and services to a trade in tasks. Trade induced by comparative costs differences implies that a country will specialize in producing goods or services where its comparative cost advantage is largest as compared to its trading partner. Figure 1(a) shows this traditional Ricardian trade theory for two countries, A and B. Country A produces product X and the whole production process with tasks X1, X2 and X3 is executed at home. A similar situation applies for

country B with product Y. Here, the tasks Y1, Y2 and Y3 are conducted in the home country. In this traditional trade situation comparative advantages in production lead country A to export X to B and country B exports product Y to A.

However, when the potential for increased fragmentation of production becomes exploited, specialization will take place at a more detailed level, namely at the level of tasks. Now the international division of labour no longer covers the different products but the tasks in production. The higher the degree of standardization and the less the customer contact (so with less asset specificity) the easier it is to separate tasks that can be outsourced. Figure 1(b)assumes that the organization of the production of both product X and product Y takes place in country A. Apparently, this country has a comparative advantage in orchestrating production. All tasks with respect to product Y are outsourced to country B, while for product X only task X3 is conducted at home, for instance because that task requires specific skills which cannot yet be outsourced or because the transaction costs of outsourcing are higher than the reduction of the costs of execution of the task abroad. It is clear that a major change in trade flows between the countries results from this new organization of production. Country A is exporting both products X and Y whereas it is importing tasks. For country B, which has a comparative advantage in the execution of tasks, the opposite is true.

III. Trade between China and The Netherlands

This section argues that the fast growth of the Dutch China trade can be neatly explained by the theory of a trade in tasks, given the specific endowments of both countries. First the differences between the two countries are characterised by a number of economic indicators. Then developments in their bilateral trade flows are discussed from the perspective of trade in tasks.

Key statistics

Table I illustrates some important differences between China and The Netherlands. The Netherlands is a medium sized highly developed and open economy. China on the other hand is much bigger, but clearly less developed and open. For example, compared to The Netherlands, China has a much higher child mortality rate (1.8 vs 0.4 per cent), lower life expectancy (73 vs 81 years) and a quarter of the urban population does not have access to proper sanitation facilities. Also in terms of technological progress, China seems to lag behind The Netherlands a great deal. In 2010, only about a third of the people have access

to the internet, while this is more than 90 per cent for the Dutch. Also, The Netherlands ranks among the top five countries based on indicators such as employment in knowledge intensive activities and the availability of latest technologies, while China's rank based on these indicators is 100 and 107, respectively [3]. The gap between quality of the educational system is smaller though still substantial. The Netherlands have the 13th best educational system, while China's rank is 57. Although the Chinese regard themselves as excellent traders (and indeed all over the world they are), Table I shows that (as a percentage of GDP) trade is much more important in The Netherlands. Moreover, The Netherlands is mainly a service economy, while in China agriculture and industry are still dominant. Perhaps, the most striking feature is that despite its large economy, China's income per capita (USD 7.5K p.a.) is still almost six times smaller than in The Netherlands (USD 42.2K p.a.). Although China has surpassed Japan as the world's second largest economy, it seems that China still has a long way to go before reaching the development stage of The Netherlands or similar well-developed OECD countries.

Growth and composition of bilateral trade

Despite the large differences and distance between China and The Netherlands, their bilateral trade has grown remarkably fast over the past ten years. Figure 2 shows the monthly import, export and total trade between China and The Netherlands between 1996 and 2010. The figure reveals that most of the trade growth between The Netherlands and China has mainly been driven by imports from China. Figure 2 also shows that the trade growth really took off after 2001, the year in which China joined the World Trade Organization (WTO). This is not surprising since accession to organizations like the WTO has been shown to increase trade (Kim, 2011). This mechanism works via direct effects such as tariff and quota reductions and indirect effects such as increased institutional quality and trust (Zhao and Wang, 2009; De Groot *et al.*, 2004) and the use of international standards (Jansen, 2010). However, looking more closely at the trade flow data suggests that there are two more important explanations for the prolific growth in Dutch China trade. The first explanation is related to function of distributor that The Netherlands plays between Asia and Europe. A large part of the imports from China seem to be re-exports. Re-exports are imported goods that are imported only to be re-exported again, albeit with slight modifications. The difference with transit trade is that re-exports temporarily become property of a Dutch resident, while transit trade goods do not. The difference is crucial though because there is value added to the products during their stay in The Netherlands. A typical example of re-export would be computer hardware that is imported

from Asian countries, fitted with the proper (European) version of Windows, and exported throughout Europe. Re-exports have gained considerable importance in Dutch trade. In 1996, they were only 27 per cent of total Dutch export (Jaarsma, 2005). Figure 3, however, shows that this percentage has risen to 44 per cent in 2010. This increased importance percentage of re-exports illustrates the increasing specialization of The Netherlands as a hub for distribution to the European hinterland.

The second explanation is related to outsourced off shoring to China. It seems that The Netherlands have outsourced production and assembly tasks to China (Berghuis and Den Butter, 2009). Berghuis and Den Butter show that Dutch import of intermediate goods from China has risen more than 43 per cent per year between 1996 and 2006. However, not only in absolute terms, the share of Chinese intermediate goods in Dutch import has also risen more than 30 per cent during the same period. Thus, China is becoming an increasingly important trade partner of The Netherlands in intermediate goods. This is a typical example of the Dutch skill in orchestrating production. It outsources the tasks with little or no comparative advantages and specialises in tasks where the labour force has specific skills.

A major reason of this paper to take the Dutch China trade as illustration for the trade in tasks is that trade between these two countries has been growing even faster than China's trade growth with its main trading partners. Table II contains descriptive statistics and *t*-ratio tests on the difference between China's trade growth with its main partners and China's trade growth with The Netherlands. It shows that The Netherlands is one of China's main trading partners measured by trade value (column 1), alongside economic giants such as the USA, Japan and India. Admittedly, trade between China's top four partners and The Netherlands is considerably smaller. However, columns 2 and 3 show that Dutch China trade growth has in fact been significantly higher (on average) than these trading partners for the past 15 years. The largest difference is with Japan (8 per cent-points) and Taiwan (5 per cent-points). But also compared to the USA, China's number one trading partner, there is a substantial difference (4 per cent-points). These differences are statistically significant for all top four trading partners.

Table II also shows that Dutch China trade has been growing faster than China's overall trade with the world, a difference of almost 3 per cent-points, significant at the 5 per cent level. The only country that has experiences significantly faster trade growth than Dutch China trade is India China trade. The difference is remarkable though (−8 per cent-points) and significant at the 1 per cent level. Trade with the Philippines did also grow faster than

with The Netherlands, but is insignificant at conventional levels. A reason for this can be that India and the Philippines both have export baskets that are very compatible with China's needs. India for example is naturally well endowed with iron ore, which China needs for its production sector. In fact, 52 per cent of Indian exports to China comprised iron ore in 2008[4]. The Philippines on the other hand is skilled in the production of several high tech components, which China uses to assemble other high tech goods (Lall and Albaladejo, 2004). These patterns are, by the way, understandable from the Ricardian view of trade.

However, for Dutch China trade, Ricardian trade theory does not offer a satisfactory explanation. Table III shows the composition of Dutch China trade according to the standard international trade classification (SITC) in 1996 and 2010[5]. The final four columns illustrate that the types of goods imported and exported to China are not as would be expected from the Ricardian perspective. From columns 5 and 6, it appears that the bulk (62 per cent) of Dutch imports from China nowadays is goods classified as machinery and transport equipment (MTE). A large part of these imported MTE goods are computers, telecommunication devices and components and parts of computers and office machinery.

Comparing data from 2010 to those of 1996 shows that the composition of imports of The Netherlands from China has become more high-tech over the past 15 years. In 1996, MTE was only 27 per cent of import from China, while miscellaneous manufacture articles (MMA) such as footwear, clothes and handbags were the largest part of import (39 per cent). The results are even stronger results when looking at a more detailed level of data (SITC three digit level)[6]. Here, we compare the share of goods classified as “high tech” by the OECD in the total of Dutch trade with China in 1996 and 2010[7]. The results show that in 1996, 34 per cent of exports to and 25 per cent of imports from China were high tech goods. Moreover, in 2010, the share of high tech imports from China increased to 55 per cent, while the share of high tech exports decreased to 21 per cent. This is consistent with studies by Yue and Hua (2002), Rodrik (2006) and Schott (2008) who point out that China's export basket is getting increasingly more high tech. This result is puzzling from a Ricardian perspective on trade since China is (given its natural resources) expected to have a comparative advantage in low skilled labour intensive products. On the other hand, the increased technology of China's export basket does not necessarily indicate technological advancement. Table I has already shown some statistics indicating that China is not very technologically advanced compared to The Netherlands. In addition, there is much literature that China is adept in the assembly of high-tech goods (with the

use of production from other Asian countries) rather than in actual production (Gaulier *et al.*, 2007; Suyker and de Groot, 2006; Branstetter and Lardy, 2006).

On the export side, Table III shows that goods exported to China are somewhat more in line with expectations based on traditional comparative advantages. The Netherlands mainly exports MTE, crude materials (CM), chemical and related products (CRP) to China. These groups include products such as machinery and equipment specialized for particular industries, valves, industrial cooling and heating equipment (MTE), metal scrap, bulbs and flowers (CM) and chemicals such as hydrocarbons, alcohols and phenols (CRP). The Dutch are known to have expertise in for example chemical goods and light bulbs due to companies like Philips (light) and Akzo Nobel (chemicals). Apart from the difference in composition, there is also a difference in size between exports and imports of China and The Netherlands. In 2010, Dutch exports to China were only around 15 per cent of total Dutch China trade.

How exactly does this outsourcing of tasks between The Netherlands and China work? We provide some specific cases to illustrate [8]:

- Assembling manufacturing and sourcing group BV (AMS): Dutch company that produces various plastic moulds and prototypes for Dutch and European clients. AMS coordinates the production process from The Netherlands, where the company is registered, and where the products are designed and distributed, while assembly and production is done in house in China (Foshan) via a subsidiary.

- Philips: listed Dutch Electronics Company active in health care, lighting and consumer electronics. Like AMS, Philips is headquartered is in The Netherlands, from where it organizes the production process of its products. Design, marketing and R&D for example are in The Netherlands, while production is outsourced to various low cost countries like China, Indonesia and Hungary. Interestingly, Philips outsourced production of its shaving machines to China but decided to move production back to The Netherlands in 2011 after concluding that the net costs of producing in The Netherlands were lower. This is a typical example of an orchestrating firm that dynamically moves production where it is cheapest.

- Ferm: Dutch “do it yourself” tools manufacturer and seller. The company is Dutch based, but sources production from China through its subsidiaries (in house). It then imports these products to The Netherlands and sells most of them to Eastern

European countries and the Middle East. Thus, coordination of production, design, marketing and distribution are done in The Netherlands, while production is in China and the market is in Eastern Europe/the Middle East.

IV. Conclusions

The analysis of Dutch China trade in this paper suggests that differences in comparative advantages based on natural factor endowments are an unsatisfactory explanation for the Dutch China trade composition and evolution. Dutch trade with China has been growing faster than can be explained by comparative advantages or GDP growth alone. Moreover, from this perspective of standard trade theory, the composition of imports from China appears to be too high tech. Therefore, we argue that patterns of trade between China and The Netherlands can be regarded as a neat illustration of the recently developed theory of trade in tasks. Whereas The Netherlands has comparative advantages in organizing and orchestrating production, China is a major supplier of tasks that are relevant to the unbundling of production processes (assembly). Given these comparative advantages, knowledge of and investments in the Dutch orchestration and distribution skills is key for the Dutch economy and future welfare. Part of these investments, e.g. in knowledge and infrastructure, have the characteristics of a public good since they are non-rival and non-excludable. Thus, government intervention is needed here. The government should focus more on investments in innovations that reduce transaction costs instead of the current focus on traditional R&D investments. For China, policy implications are that it should focus on improving its innovation capability and pay more attention on keeping its position as the place to assemble (intermediate) goods. This involves not only more investments in R&D, but more importantly improving institutions such as the quality of education, improved working conditions and the ability to leverage existing knowledge. The latter can be achieved for example by working together with the Dutch, since they seem to have an edge in this type of skill. Regarding assembly, China's position is being challenged as wages in China are increasing and some of the lower end assembly work is moving to South East Asia. To keep its position despite higher wages, China should improve the working conditions of assembly line workers. Good working conditions are becoming an important selection criterion for the location decision of multinational companies because of a shift towards socially responsible business. Moreover, China may enhance its focus on production of specific high tech components, as this gains importance in the world wide trade in tasks.