Vysoká škola ekonomická v Praze

Diplomová práce

2008 Filip Neterda

Vysoká škola ekonomická v Praze
Fakulta podnikohospodářská
Hlavní specializace: Podniková ekonomika a managment

Název diplomové práce:

Management in the global economy: opportunities and risks

Vypracoval: Filip Neterda
Vedoucí diplomové práce: Doc. Ing. Mikuláš Pichanič, CSc.

P r o h l á š e n í

Prohlašuji, že diplomovou práci na téma
"Management in the global economy: opportunities and risks"
jsem vypracoval samostatně.
Použitou literaturu a podkladové materiály
uvádím v přiloženém seznamu literatury

Filip Neterda

Abstract

The thesis start from general introduction to globalization but its focus is on the following areas: global buying of company inputs (sourcing), expanding on the foreign/global markets (output) and managing the risks associated with globalization (increased competition, foreign currency and raw material/inputs hedge). Overall the thesis is practical in its approach and thus it provides the real applicable approaches in terms of the management in the global economy. Despite these practicalities the thesis also aims at analyzing the more general business environment for global activities of a firm. This is realized in section on economic assessment of the market and evaluation of foreign currency fundamentals.

Acknowledgements

I am grateful for the practical experiences acquired during my past (Project Manager, Ariba Inc., Prague) and present (Consultant, Intersources, Belgium) employment that have influenced parts of the thesis. Special thanks go to my parents for providing continuous source of enthusiasm towards learning.

TABLE OF CONTENT

LIST OF ABRREVIATIONS

RFP	Request for proposal (Asking for company's quotation)
RFI	Request for information (questionnaire to company)
CFO	Chief Financial Officer
CEO	Chief Executive Officer
FDI	Foreign Direct Investment
ROA	Return on Assets
ROE	Return on Equity
DPP	Delivery duty paid (full price of the product including transport and duties)
KPI	Key performance indicator (the key indicators measured during contract period)
PPM	Parts Per Million (used to measure the defect rate)
LCC	Low Cost Country
VAT	Value added tax
GDP	Gross Domestic product
BCG	Boston Consulting Group
PCBAs	Printed Circuit Board Assembly
OECD	Organization for Economic Co-operation and Development

1. Introduction: definition of the globalization

The term of globalization is used with increasing frequency and has become rather too general to be used precisely. In fact, the globalization is another term for increased and more complex cross border activity in different fields. The massive growth of the cross border transactions and activities that has happened since the half of the 20th century can be attributed to aspects such as: fall of the colonial systems, removal of barriers for trade and investment, integration activities (EU, ASEAN), industrialization and economic growth of the poor countries, end of cold war or massive growth of international connectivity (internet, communications, transportation). My effort in this thesis is concentrated on the economic aspects of globalization which is in my opinion the principal pillar and main driver of the globalization as we know it today. Therefore, let me give some examples of definition of the economic globalization:

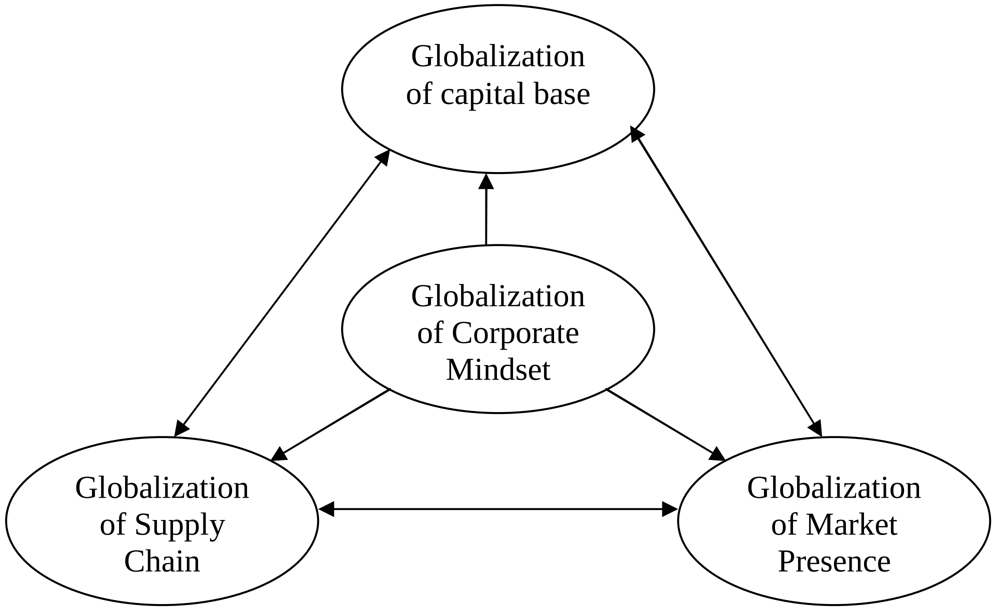
"It is a set of processes leading to cross-border integration of factor, intermediate products, and final products markets along with an increasing salience of multinational corporations in economic activity. Three aspects of this definition are noteworthy. First, globalization is best viewed as a set of processes and not as an end state. Second, cross-border economic integration now spans products and commodities that are at various stages of the value-addition processes. Third, multinational corporations are the main agents of economic integration. In fact, I would submit that the main difference between globalization now and the previous phases of economic integration is the increasing role of multinational corporations.” Aseem Prakash, The George Washington University Washington, D.C.[1]

At the OECD, we interpret economic globalization as a process of closer economic integration of global markets: financial, product and labour. Angel Gurría, Secretary-General of the OECD[2]

IMF (2006) states that “...globalization is defined broadly as the acceleration in the pace of growth of international trade in goods, services, and financial assets relative to the rate of growth in domestic trade.” International Department, Bank of Japan[3]

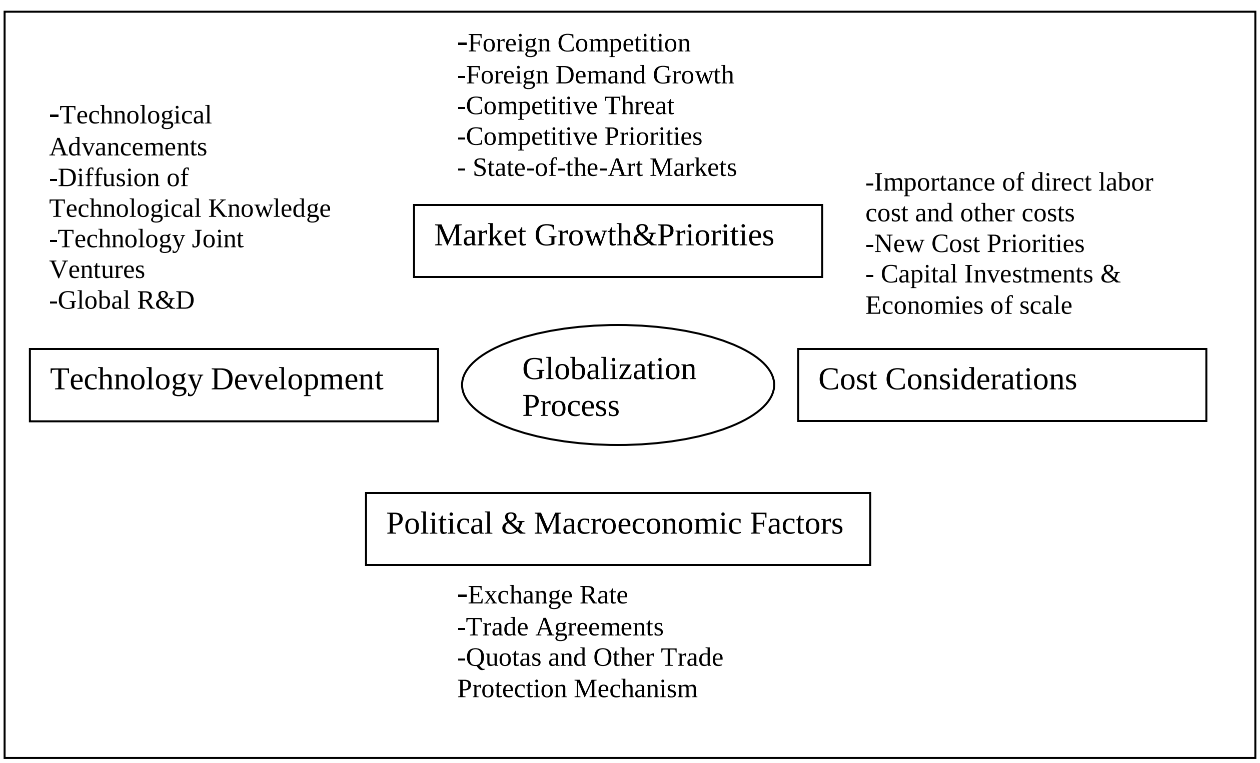
The above definitions are pointing to the emergence of global market with goods, services and financial markets. Also, it is mentioning the role of multinational companies which are companies that can either have multiple centers around the globe, or have the foreign ownership structure or pursue the global profit maximization as their goal[4]. The motivations that can make company to “act globally” in the global markets are depicted in the below chart:

[1] Governance and Economic Globalization: Continuities and Discontinuities, Prepared for Presentation to the United Nations General Assembly, New York, September 30, 1999
[2] Managing globalization and the role of the OECD, Korean University Business School, 20 September 2006
[3] Economic Globalization and Inflation: The Case of the EMEAP Economies
[4] http://www.econ.iastate.edu/classes/econ355/choi/mul.htm



The Quest for Global Dominance, Govindarajan Gupta, Jossey-Bass A Wiley Company, 2001

Other chart on globalization forces is provided by Stanford professor Mr. Hau Lee:



Building Supply Chain Excellence in emerging economies, Hau L. Lee, Chung-Yee Lee, Springer, 2007

2. The methodological approach and aim of this thesis

My thesis is divided into the following main parts:

1) Buying company inputs (Input side)
2) Expansion on the Foreign markets (Output side)
3) Capital markets and the hedge against the global risks.

The reason for the above structure is to describe the practical aspects associated with the globalization or internationalization from the point of view of the management of a business entity (firm). In my opinion, there have been many theoretical studies describing the globalization too generally or in a hardly tangible way (the definitions on economic globalization provided in chapter 1 are also rather general). Thus, the globalization process has or become too complex for the business entities or management. Also, many companies have missed on globalization which resulted in immediate or implicit losses. Therefore, I wanted to show such examples and draw lessons from them. When creating this structure I tried to look from the company perspective and ask the following relatively basic questions:

1) How does the globalization impact on the inputs the business is buying for its production?; (Input)
2) How can the final products/services be best sold to foreign customers? and (Output);
3) How to hedge against the possible risks associated with the global/international company activities or against the impact of globalization on the domestic activities of a company? (Risks)

As stated above the usefulness of the provided information in each of the three parts is the main goal of the thesis. Therefore, one could even think that the thesis is rather manual for management as to how to onboard on the globalization for every company which is willing to do so. This is in fact true observation, as the partial goal of each section is to show that every company can take the benefit of the globalization. It is nothing reserved for the big players that can pay expensive consultants or in house staff to do the job. The messages of the main chapters could sound as following: Yes, you can buy your inputs cheaper from overseas/abroad! Yes, you can sell your products internationally! Yes, you can expand internationally! Yes, you can evaluate the perspective market! Yes, you can eliminate the currency risk! Yes, you can defend against the increasing competition! Yes, you can find the sources of cheaper financing! Yes, you can defend against the increases of energy and raw materials prices! Etc.

The methodological approach is therefore to describe the best generally recognized approaches to efficient global business operations in all of the three main chapters (Input, Output, Risk). However, in two out of three of these main chapters (Output and Risks) I also present my own suggestions. The first one is concentrated on the Matrix to high level economic assessment of market/economy (Output chapter). Here, I put forward ideas/aspects that are in my opinion crucial for assessment of the presence on certain market in order to avoid losses from economic or politic turbulences. The second one is concentrated on the comprehensible approach for establishing the foreign exchange currency valuation (Risks). Here, I present the main criteria to look at when estimating the currency valuation before taking the hedge position. This is supported by the example of my own currency hedge.

3. Buying company inputs (Input side)

Every company is working on the basis of inputs and outputs. The input can also be referred to as goods and services bought in order to create/produce the outputs that are sold by the company. Let’s examine the principal question: Why shall the companies buy their inputs internationally? The answer is simple: in order to buy the same quality for lower price.

3.1. Benefits from internationalization of supplier base

The international markets offer the possibility of sourcing from low cost regions (LCC). Sourcing can actually be seen as new stage of international trade. However, it shall not be seen as Foreign direct investment mode of entry to the market (more on this in chapter 2) but as buy-supply relationship. As for the LCC regions they have often competitive advantage in many areas such as cost of labour, energy/other utilities, regulatory standards, lower taxes and other overhead costs[5]. Important is also the level of educated work force that is abundant and cheap. China is for example popular destination for R&D facilities for companies like GM, Siemens or Nokia[6]. Therefore the low cost areas are also good fit for sourcing the products with high added value. The very important is the fact that company can broaden the pool of competition and thus in combination with the effective sourcing technology (see chapter 3.4.5) achieve substantial savings on the company's spend. In my past employment with Ariba[7] I have had the personal experience with LCC sourcing of the machined parts, flanges and electronic products and due to the fact of inviting the Asian competition the price has decreased on average of 45% compared to the spends in high cost region. The level of around 30% savings against high cost locations is widely confirmed and in fact, many procurement executives view LCC as one of the most effective alternatives to combat rising energy and transportation prices and inflationary pressures in traditional and more established supply markets[8]. The chart below gives clear overview that the price is the main driver for low cost sourcing (benefit).

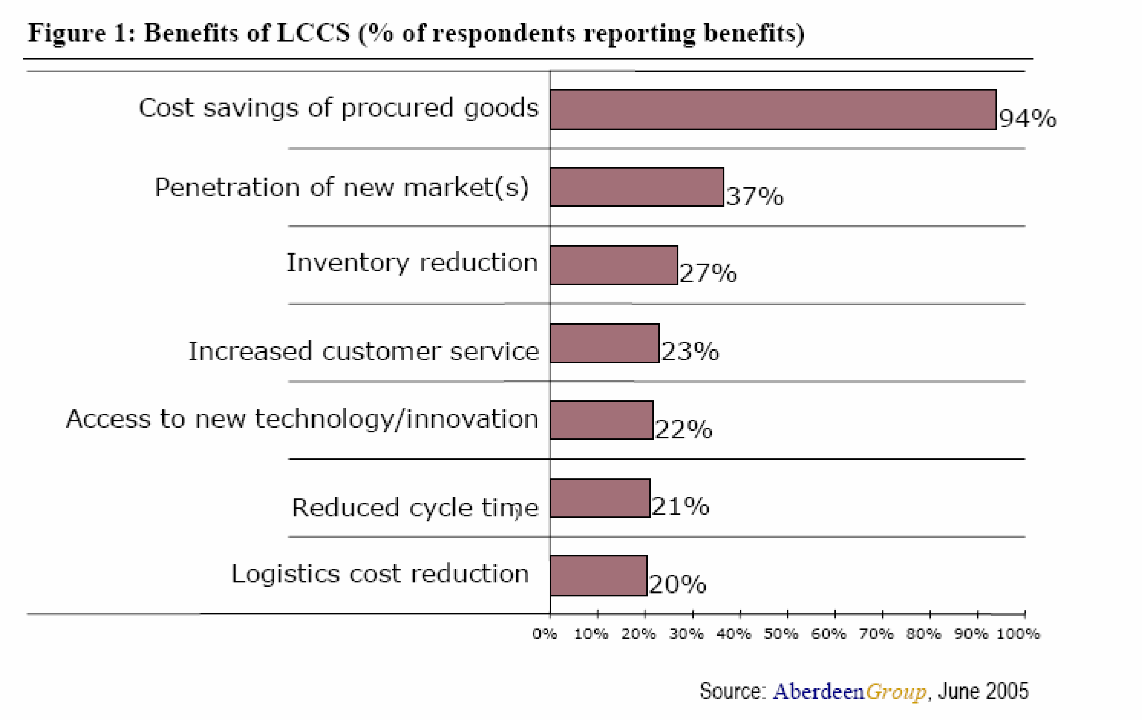
---

[5] http://yalepress.yale.edu/yupbooks/hundt.ppt#847,17,Advantages for Chinese firms

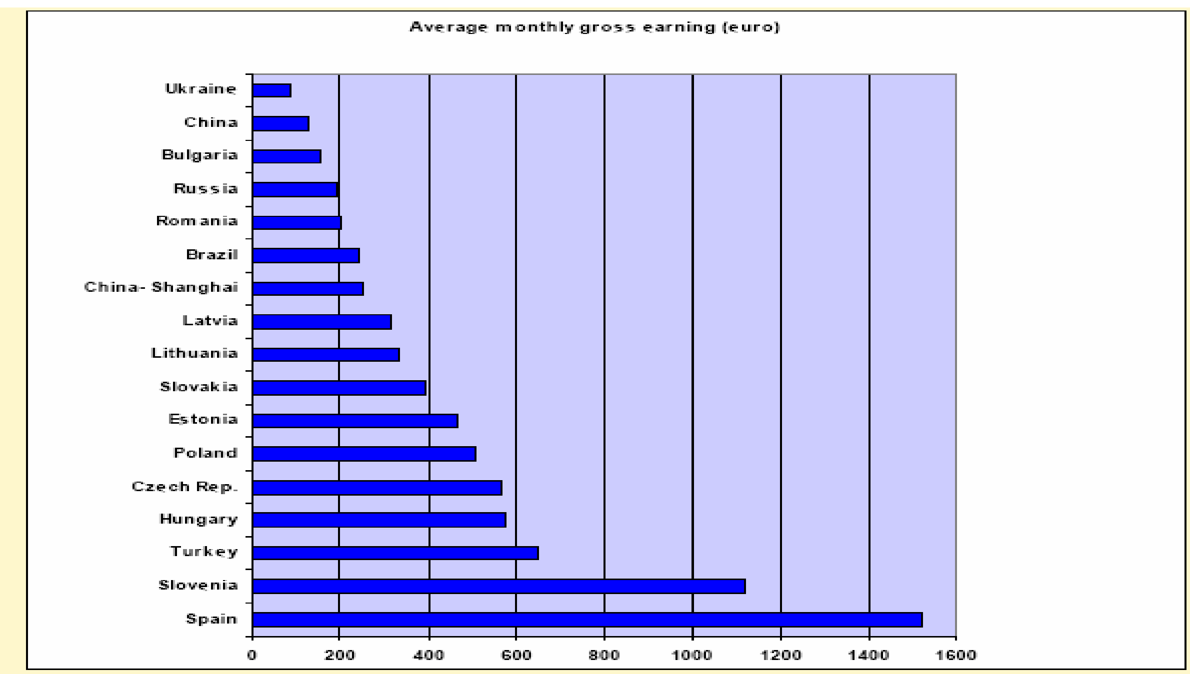
[6] Building Supply Chain Excellence in emerging economies, Hau L. Lee, Chung-Yee Lee, Springer, 2007

[7] From June 2006 to August 2007 as Project Manager now working in the same field for Belgian consultancy Intersources in Leuven, Belgium

[8] Low-Cost Country Sourcing Success Strategies, *Maximizing and Sustaining the Next Big Supply Savings Opportunity,* Aberdeen*Group, 2005*



As mentioned above the labor cost significant benefit for LCC sourcing:



Source: Presentation Could Ukraine become the China of Europe? Firm Eurocar from Solomonovo in Ukraine

Not only the labor cost but also the raw materials such as heavy oil, industrial gas or gasoline can be of competitive advantage in LCC countries (the circled numbers are randomly selected as low or low in combination with LCC countries):

RETAIL PRICES[a] IN SELECTED COUNTRIES in US Dollars/Unit

	Heavy Fuel Oil for Industry[b] (tonne)	Light Fuel Oil for Households (1000 litres)	Automotive Diesel Oil[c] (litre)	Unleaded Premium[d] (litre)
Australia	..	..	..	0.885
Austria	421.28	794.80	0.825	1.276
Belgium	356.39	675.62	1.067	1.590
Canada	337.52	709.99	0.810	0.803
Chinese Taipei	297.49	x	0.628	0.751
Czech Republic	314.98	731.64	0.988	1.186
Denmark	436.49	1 218.25	1.044	1.488
Finland	445.77	755.40	0.997	1.500
France	381.48	774.22	1.071	1.458
Germany	367.39	682.43	1.144	1.519
Greece	339.72 L	1044.47 L	0.916 L	1.086 L
Hungary	387.84	x	1.020	1.241
India	..	..	..	..
Ireland	498.16	837.97	1.073	1.301
Italy	447.66	1 333.68	1.158	1.505
Japan	537.45	666.60	0.768	1.109
Korea	547.12	956.91	..	1.526
Luxembourg	208.04 L	629.84	0.940	1.271
Mexico	226.69	..	0.438	0.613
Netherlands	422.92	1 041.64	1.099	1.667
New Zealand	396.21	..	0.625	0.972
Norway	..	1 256.93	1.210	1.669
Poland	322.83	781.54	0.945	1.169
Portugal	517.68	790.61	1.114	1.473
South Africa	..	..	..	..
Slovak Republic	246.17 L	..	1.043 L	1.208 L
Spain	439.09	720.00	0.964	1.188
Sweden	c	1 257.70	1.141	1.439
Switzerland	368.06	597.94	1.141	1.227
Turkey	639.35	1 473.86	1.554	1.963
United Kingdom	391.33	593.08	1.394	1.557
United States	341.38	620.24	0.661	0.622

Nat Gas for Industry (10^7 kcal GCV[e])	Nat Gas for Households (10^7 kcal GCV[e])	Steam Coal for Industry[f] (tonne)	Electricity for Industry[g] (kWh)	Electricity for Households[g] (kWh)	
..	..	..	0.0609 L	0.0985 L	Australia
..	744.54	162.34	0.1056	0.1613	Austria
c	..	..	..	..	Belgium
221.71 L	395.18 L	..	..	..	Canada
380.70	354.97	..	0.0512	0.0690	Chinese Taipei
377.03	519.44	c	0.0892	0.1161	Czech Republic
c	1 270.76	..	0.0759 L	0.2935	Denmark
235.59	334.95	126.07	0.0701	0.1200	Finland
382.29	653.44	123.43 L	0.0483	0.1365	France
..	..	..	0.0769 L	0.1975 L	Germany
305.66 L	503.14 L	..	0.0673 L	0.1138 L	Greece
405.42	373.74	..	0.1068	0.1266	Hungary
..	..	34.89 L	..	..	India
566.23	606.43	..	0.1071	0.1842	Ireland
c	c	69.40 L	0.1684 L	0.1995 L	Italy
392.53 L	1271.52 L	65.66	0.1272 L	0.1963 L	Japan
467.42	609.75	58.72	0.0638	0.0894	Korea
..	477.53 L	..	..	0.1866 L	Luxembourg
370.63	659.40	x	0.1009	0.1010	Mexico
227.77 L	858.15	..	c	0.2443	Netherlands
166.03	743.97	c	0.0527	0.1337	New Zealand
x	x	..	0.0517	0.0856	Norway
274.80	449.72	61.96 L	0.0736	0.1250	Poland
384.42	1 009.22	..	0.1073	0.1764	Portugal
..	x	..	..	..	South Africa
275.65 L	431.22 L	..	0.0797 L	0.1295 L	Slovak Republic
344.60	726.64	..	0.0833 L	0.1535 L	Spain
..	..	..	..	..	Sweden
445.91	714.20	86.42	0.0807	0.1276	Switzerland
350.49	410.22	50.68	0.1077	0.1194	Turkey
396.84 L	519.67	85.19 L	0.1003 L	0.1580	United Kingdom

Source: International Energy Agency[9]

3.2. How to onboard and use the international supply base

Below is my proposal for establishing strategy for effective sourcing strategy for the supply chain network.

1. **Run the spend analysis -** identify the opportunities within your spend
2. **Run the sourcing process –** find the best value for the best price from reliable supply sources fitting your business strategy and needs while reducing possible risks.

[9] (http://www.iea.org/Textbase/nppdf/free/2006/Key2006.pdf)

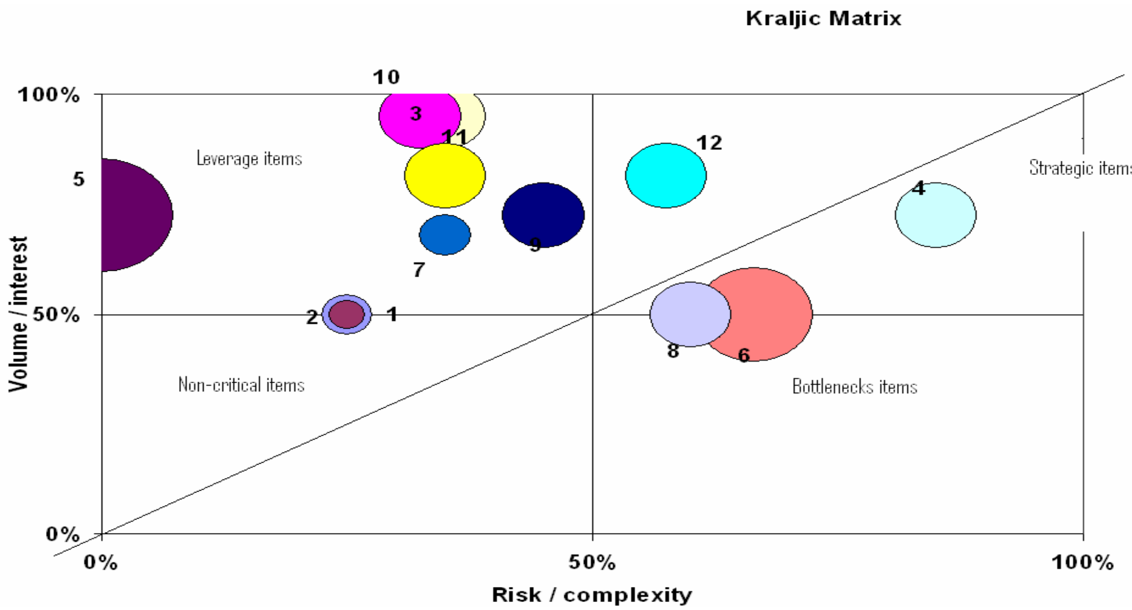
3. **Run the total cost analysis** including the logistics cost – establish the total cost of ownership and take final strategy decision
4. **Implement the sourcing outcome –** lock in the savings

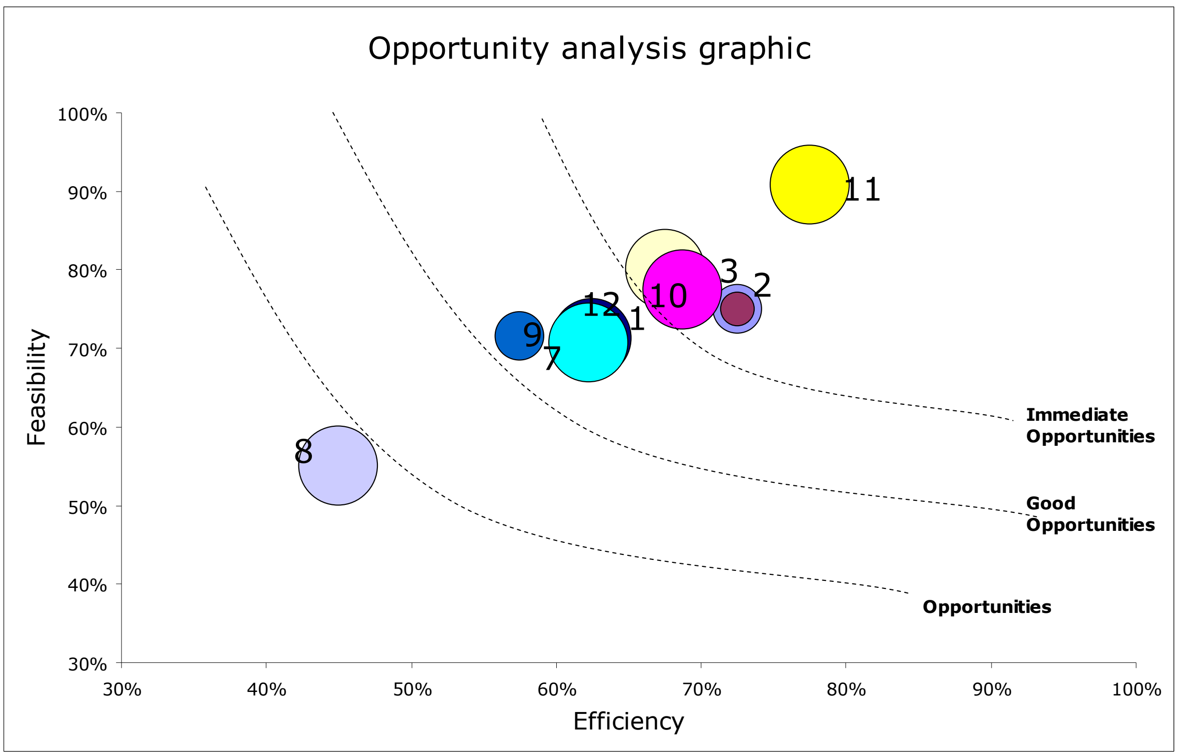
3.3. Run the spend analysis

Before any sourcing process the company needs to understand the current spend. In order to run the basic spend analysis I advice to apply the Kraljic matrix and generate the opportunities. To demonstrate it I used the excel tool that is used at my present work[10]. It consists of matrix of questions asking about the spend size, risks, market trends, number of items/complexity etc. Then it automatically generates the results. The size of the bubble is the size of spend or opportunity. In the below example I used data based on my rough estimates for highway construction (supported from public/internet sources). **Leverage items –** high spend, low risk – excellent opportunity for on-line auction /though negotiation; **Strategic items –** high spend, high risk – necessity to negotiate carefully, if above the diagonal then still good for on-line auction; **Non-critical items –** low complexity/risk, low risk – catalog buying, not difficult negotiation on-line auction easily possible especially above the diagonal; **Bottleneck items –** high risks, high complexity/risks obstacles to competition such as patents, specialized know-how or monopoly – necessary to undertake careful negotiations/supplier selection. As you can see most of the items are in the leverage buy, especially: Miscellaneous work (such as transport, delivery and minor earth works); Surveying, planning, staking the alignment and clearing right of way; Construction and environment protection works (bridges, retaining structures and soil stabilization works). They are big in terms of size and easy to buy. Very interesting is the big blue bubble - Formation of the road that represent huge spend and good feasibility. On the other end is Crushing gravel and Rock blasting. The first one is very expensive to transport and there are only few sites disposing of crushing gravel. The second one is technologically advanced and there are only few companies

[10] Employer: www.intersources.com. Other source for this chapter: Power and interdependence in Kraljic's purchasing portfolio matrix, Marjolein C.J. Caniëls and C.J. Gelderman, Competitive paper presented at the IPSERA 2005 Conference

that can blast the rock for highways. The on-line auction wouldn't probably yield the results here.





1. Camp Site Construction
2. Camp Set up

3. Surveying, planning, staking the alignment and clearing right of way
4. Trucking Construction Equipment
5. Formation of the road
6. Rock blasting
7. Drainage facilities (ditching, culverts)
8. Crushing gravel
9. Gravelling, grading and compacting
10. Construction and environment protection works (bridges, retaining structures and soil stabilization works).
11. Miscellaneous work (such as transport, delivery and minor earth works)
12. Project servicing and supervising costs

The above is the example of the excel macro tool calculation. However you can easily do the manual prioritization by answering the questions and counting the answers for each category - "Absolutely Yes"=Non critical items, "Yes"= Leveraged items, "No"=Strategic items and "Absolutely No"= Bottleneck items (see the below box). After counting the responses ("Absolutely Yes", "Yes", "No", "Absolutely No") for the given category you can position the spend in terms of complexity. For all categories except of Bottle neck items the On-line bidding event shall be performed (see chapter 3.4.5).

Have you identified many companies delivering this product? Is the spend big in relation to you expenses? Can you allow short term contracts? Are these items low risk in other words can you find alternative source quickly? Do you consider the market as buyer's market? Is the added value of suppliers low? Are the switching costs of suppliers low? Is the partnership based on price rather than on quality and service? Are all the data available? Is the complexity of the current supply chain low? The spend doesn't require many suppliers in order to be sourced? The spend doesn't require significant new investment from the new supplier? The failure of the supplier has no effect on your end customer relationship? Is your spend attractive for the supplier base? Is the supplier base running overcapacity i.e. opposite of market demand exceeding the supply capacity? You don't see any risk with the change of the supplier? Do you see high savings potential e.g. high ratio of labour cost? Market prices are decreasing i.e. the market is competitive?	Answer type: "Absolutely Yes"; "Yes"; "No"; "Absolutely No"

When establishing the opportunities it should be carefully avoided overstating the risks and potential problems as it is purely the identification of opportunities for the sourcing step which is nothing else than fair and proper execution of the buying process. However, the outcomes from opportunity analysis have crucial aspect on the sourcing process scope and strategy.

3.4. Run the sourcing process

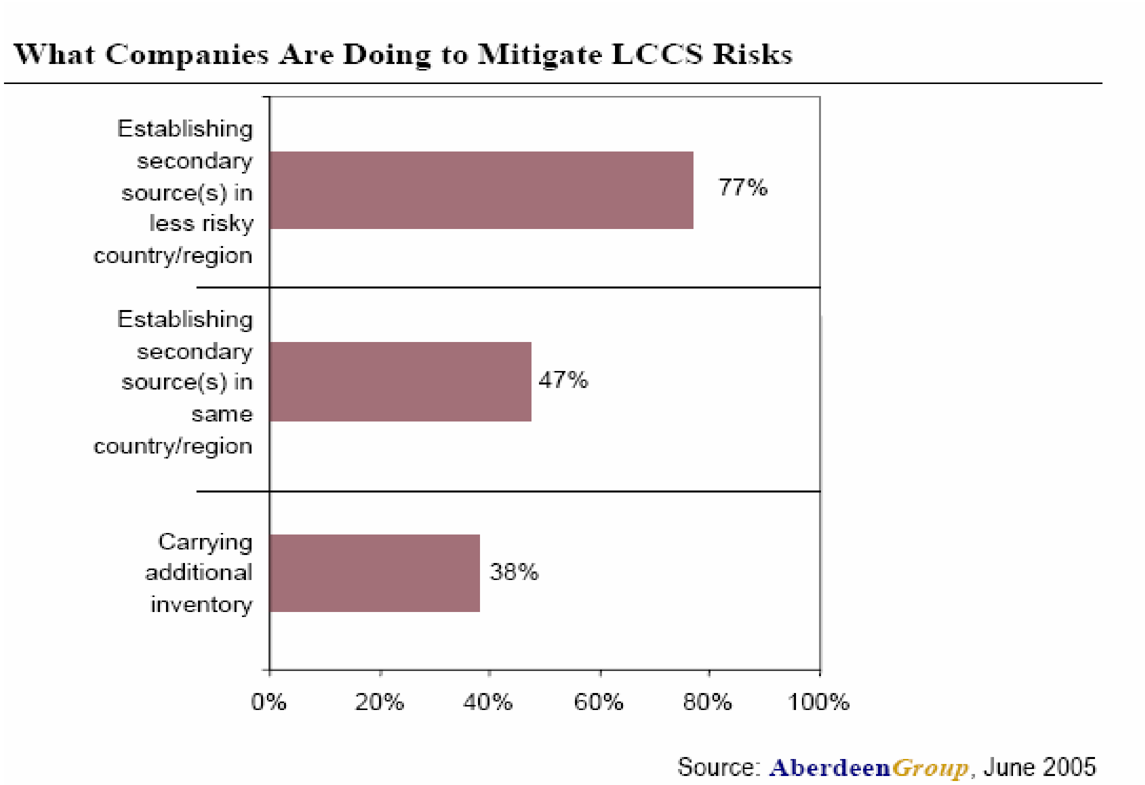
The company has established the spend opportunities and is ready for the sourcing process which consists of the following:

1) **Establishing supplier strategy - addressing risks**
2) **Consideration of transportation arrangement, inventory and other costs**
3) **Supplier identification**
4) **Drafting of the content of the tender –** RFx text, Cost Breakdown preparation, gathering of complete data and drafting of screening questions for the suppliers
5) **Publishing of the tender**, **supplier management & negotiation**

3.4.1. Establishing supplier strategy and addressing the risk

As stated in the section 3.1 the benefits from international supply base are numerous. However, there is still a lot of misjudgment and irrational risk aversion of buyers regarding the international and especially Asian supplier base. In order to make organization grow and prosper this needs to be rooted out. Below are some of the perceptions with answers to them:

- The overseas supply is too risky because of quality issues. Reply: Quality of the supplier can be assessed during the Request of Information (see chapter 3.4.4) in which it is possible to ask all questions regarding the financial situation, references, equipment, technical capabilities etc. After the sourcing, the selected competitive suppliers shall be visited and on-site audited before the award of the business. After the award the supplier first sends the samples for approval, and then the production starts. Over the course of production the KPI are established and monitored. The profoundness of the above described process of quality check depends on the risk level based on the equitation: Supply chain risk = Probability of disruption x Impact[11]. In order to eliminate this risk the spend can be sourced wit low cost suppliers but the award can be done only partially to low cost area (e.g. 40%) thus further limiting the risks of the supplier failure and/or higher inventory (see below for the survey of Aberdeen Group on this subject). Company shall never create the system, unless the commodity really requires it, in which it qualifies the suppliers in a complicated and lengthy process upfront and only after that they are allowed for the sourcing part. I have seen one such example in my career and the negative impact on competition / savings is tremendous.



- The lead times of delivery of my products are too short. Replay: Yes, the risk of longer lead times is a real concern[12]. However, there can be many solutions to it. First, the supplier can have the warehouse in Europe / US. Second, the contracting party can require the safety stock requirement at supplier premises. Third,

[11] Logistic and Supply Chain Management, Creating Value-Adding network, Martin Christopher, 3rd edition, FT Prentice Hall, 2005
[12] Low-Cost Country Sourcing Success Strategies, *Maximizing and Sustaining the Next Big Supply Savings Opportunity,* Aberdeen*Group, 2005*

depending on the volume and product the overseas suppliers can accommodate even short delivery times, e.g. 14 days. The answer is therefore not "no" but stating the delivery requirements in the scope of the project and asking the quotes of suppliers based on these conditions – give them the chance to offer.[13]

- My demand is very flexible / seasonable and the overseas suppliers can't accommodate it. Replay: Yes, e.g. Marks & Spencer ran into the serious problems when it adopted the low cost sourcing strategy which however required long forecasts of production. When the trends of fashion changed quickly in late 1990's they were stuck with outdated items. Therefore, they changed the strategy and source high standard/predictable items such as man's shirt and socks from low cost locations and the innovative special lines with low volume, short life cycle with difficult demand predictability from very responsive and reliable supply chain (usually UK companies located overseas)[14]. Therefore, the answer is to split the spend and source the more reliable part from overseas and the other one from local responsive supplier base.

3.4.2. Transportation arrangement, inventory and other costs

There is no doubt that the declining cost of transportation (since 1950) has been one of the driving forces of globalization[15]. However, when measuring the supplier performance of the overseas suppliers against the international suppliers the transport and logistics is always less favorable for the international supply base as the supply and logistics network becomes more complex[16]. There are several approaches to address this. The simplistic approach may be that company always require suppliers to quote DDP (all included - transport and duty in the price). This however has the disadvantage that suppliers will not participate due to the fact that their core production is not transportation and they can't offer DDP (delivery, duty paid) or they offer unreal quote, usually to high. In my opinion the company shall work more profound on this subject in order to make the international

[13] Supply Chain Management, Strategy, Planning, and Operation, Sunil Chopra and Peter Meindl, Parentice Hall, 2001
[14] Logistic and Supply Chain Management, Creating Value-Adding network, Martin Christopher, 3rd edition, FT Prentice Hall, 2005
[15] The Quest for Global Dominance, Govindarajan Gupta, Jossey-Bass A Wiley Company, 2001
[16] Global Cases in Logistics and Supply Chain Management, David H.Taylor, Thomson Learning, 1997

sourcing strategy successful. The impact of using different modes of transportation on inventories, response time, and cost is shown in the below table.

	Rail	Truck Load	Less Than Truck Load	Package	Air	Water
Lot size	5	4	3	1	2	6
Safety inventory	5	4	3	1	2	6
In-transit inventory	5	4	3	1	2	6
Transportation cost	2	3	4	6	5	1
Transportation time	5	3	4	1	2	6

Global sourcing logistics: how to manage risk and gain competitive advantage in a worldwide marketplace. Cook, Thomas A. New York : AMACOM, 2007

Let’s demonstrate the above on the example. Eastern Electric (EE), a major motor appliances manufacturer in Chicago area, purchases the 120,000 motors/year from Westview at a price of $120 per motor. Demand has been constant and is expected to stay so. Each motor weights about 10 pounds in weight and EE has traditionally purchased in lots of 3000 motors. Supplier ships each EE order within a day of receiving it. EE caries safety inventory equal to 50% of the average demand for motors during the delivery lead time. The plant manager at EE received the following proposals for transportation:

Carrier	Range of quantity Shipped (in 100 ponds)	Shipping Cost $/100 pounds
AM Railroad	200+	6.50
Northeast Trucking	100+	7.50
Golden Freightways	50-150	8.00
Golden Freightways	150-250	6.00
Golden Freightways	250-400	4.00

Further the Golden Freightways proposes to lower the transportation cost for range 250-400 to $3. The new proposal will result in very low transportation cost if EE orders in lots of 4000 motors. Now, the plant manager includes the cost of inventory holding in the transportation. EE’s annual cost of inventory holding is 25% this implies annual holding cost of H= $120 * 0.25= $30 per motor. Shipments by rail require 5-day transit, whereas shipments by truck have a transit time of 3 days. The AM Railroad proposes requires minimum shipment of 20,000 pounds or 2,000 motors. The replenishment lead time in this case is L= 5+1=6 days. For a lot size of Q=2000 motors, the plant manager obtains the following:

Cycle inventory (inventory that varies with a cycle) = Q/2 = 2000/2 = 1000 motors
Safety inventory = L/2 days of demand = (6/2)(120,000/365) = 986 motors
In-transit inventory = 120,000 (5/365) = 1,644 motors
Total average inventory = 1000 + 986 + 1,644 = 3,630 motors
Annual holding cost using AM Rail = 3,630 x 30 = $108,900

AM Rail charges $6.50 per 100 pounds, i.e. $0,65 per motor (each motor weights 10 pounds) => Annual Transportation cost using AM Rail = 120,000 x 0,65 = $78,000. The total annual cost for inventory and transport using AM Rail is thus $186,900. The same calculation was done for the other alternatives (see the table below).

Alternative	Lot size	Transportation cost	Cycle Inventory	Safety Inventory	In-Transit Inventory	Inventory cost	Total Cost
AM Railroad	2.000	$78.000	1.000	986	1.644	$108.900	$186.900
Northeast Trucking	1.000	$90.000	500	658	986	$64.320	$154.320
Golden Freightways	500	$96.000	250	658	986	$56.820	$152.820
Golden Freightways	1.500	$96.000	750	658	986	$71.820	$167.820
Golden Freightways	2.500	$86.400	1.250	658	986	$86.820	$173.220
Golden Freightways	3.000	$78.000	1.500	658	986	$94.320	$172.320
Golden old proposal	4.000	$67.500	2.000	658	986	$109.320	$176.820
Golden new proposal	4.000	$63.750	2.000	658	986	$109.320	$173.070

The answer is that if we account for the inventory cost, the plant manager doesn't select the cheapest cost of transport, but quite on contrary the most expensive one because he can achieve the lowest total cost with it.[17]

The transportation and inventory therefore needs to be carefully considered and this has to be done solely on the basis of the calculations. Other considerations/options could include stopping of the inventories in the regional retail locations and aggregating them in one warehouse from which they will be sent directly to customers. In general aggregation is good with large value to weight ratio, big customer orders and high demand variability, e.g. for PCs. It is usually not a good fit for products with small value to weight ratio, small consumer orders and small demand variability e.g. best selling books.[18]

To conclude on the transportation I strongly recommend that the **buying company takes the responsibility for transport arrangement in its supplier strategy** as it knows it full inside of the logistics requirements. As a solution I suggest that it makes sourcing through On-line bidding event (see chapter 3.4.5) of the exclusive contract with a global forwarder (DHL, Maersk etc.). Then, the supplier can deliver to the forwarder's hub which is always located in the given country or region. The company uses the economy of scale for the transportation of its internationally sourced spend and thus optimizes the total cost of the transportation spend[19]. It is too easy to make the supplier quote DDP but his transport quote will never achieve the efficiency that can be obtained by orchestrating the company wide solution for the entire spend[20], let alone the possible problems with supplier deliveries (unknown company of transport) and the unwillingness of suppliers to offer quotes if faced with the requirement to quote including transportation costs.

[17] Supply Chain Management, Strategy, Planning, and Operation, Sunil Chopra and Peter Meindl, Parentice Hall, 2001

[18] Logistic and Supply Chain Management, Creating Value-Adding network, Martin Christopher, 3rd edition, FT Prentice Hall, 2005

[19] The same recommended in Building Supply Chain Excellence in emerging economies, Hau L. Lee, Chung-Yee Lee, Springer, 2007

[20]The same supported in this book: Logistic and Supply Chain Management, Creating Value-Adding network, Martin Christopher, 3rd edition, FT Prentice Hall, 2005

The Transportation and inventory carrying cost is the most important factor when looking at the costs to be added to the finished product. However, the following shall also be taken carefully into account when calculating the total cost:

- **Duties and taxes**. The rule is to buy from / establish production in low cost – low taxation areas. The taxes shall be assessed on global scale and in full complexity (direct, indirect-VAT, consumption taxes, agricultural levies, stamp taxes). When globally restructuring the supply chain the taxes is a must. The example of US based global consumer goods manufacturer showed the following impact on profit after taxes: tax optimization alone +21%, Supply chain optimization alone +45%, Supply chain and tax optimization combined +98%.[21]
- **Relationship management** costs – managing costs of relationship with company in different time zone, culture and language compared to the domestic partner.[22]

3.4.3. Supplier identification

We can assume that the company has now clear position on inclusion of the international suppliers (no a priori denial of Asian, East European, Russian suppliers etc.). Also, we can assume that the company established the inventory cost in transport and has framework transportation contract in place which can accommodate the international supply base. With this list the company can search the potential suitable suppliers. The first and very good possibility is the internet (www.kompass.com, www.made-in-china.com, www.indiamart.com, www.alibaba.com etc.). The other option is to pay local consultancies to conduct the search. The third option is to send its own people on the targeted territory in order to locate the companies. The fourth option, however only for Czech companies, is to use the service of Czech Trade that has good establishments and knowledge on the foreign markets. Its services are also relatively very affordable.

After the establishing of the full list, the suppliers shall be screened and shortlisted based on the information provided on their web sites (turnover, production capability etc.). Then, their interest shall be confirmed by sending the Opportunity Overview detailing the

[21] Building Supply Chain Excellence in emerging economies, Hau L. Lee, Chung-Yee Lee, Springer, 2007
[22] Building Supply Chain Excellence in emerging economies, Hau L. Lee, Chung-Yee Lee, Springer, 2007

business up for bid and “killing criteria” (e.g. must have machining capabilities, ISO 9001 etc.) that is no longer than 1 page. Those that confirm the intend to participate shall proceed to the tender.

3.4.4. Drafting of the content of the tender

This chapter will be based mainly on my past professional experience. The aim of the sourcing process is to: A) screen suppliers in terms of quality and B) run the price negotiation. If the suppliers are already known to the company – the A) option can be skipped.

In order to find out about the quality the Request for Information (RFI) shall be launched and answered by suppliers. As the suppliers are reluctant to answer the “questions” only, I strongly recommend joining the RFI with Request for Proposal (RFP – see later below). Obviously, the content of the RFI depends on what the buying company wants to ask from the suppliers. Therefore, the questions can be on general position of the company (turnover, number of employees, customers/references, investments etc.), machines/industrial processes available, other technical capacities, product questions, customer service etc. Only the useful information shall be asked! Very desirable is to weight the questions (scoring). This gives immediate feedback on the supplier quality.

The Request for Proposal shall stipulate the information on which the price will be based. Below you can find the matrix which can serve as a basis for listing of all the various business requirements of buyer that can be turned to RFP. The matrix is to be used as “internal inquiry” so that no possibly important information is forgotten. The responses are to be copy & pasted & edited to RFP text. Another important part is the Cost Breakdown (CBD) that contains all items, their technical specifications (either directly in CBD or as reference to attachment to external file), delivery locations, currency of bidding and Estimated Annual Usages and in which the suppliers provide their prices (see below for the example). The buying company shall not ask too detailed price breakdown in order to avoid supplier attrition (on transportation component please see the section 3.4.2). If there more items that have significant similarity (e.g. same delivery location), they can be grouped to Lots in order to have easier the competition on greater volume.

Filip Neterda thesis: "Management in the global economy: opportunities and risks"

Category	Item	Instructions	Responses
Commercial Specs	Payment Terms	Please provide your payment terms (for example: Net 60; 10% 2, Net 90).	
	Currency of Contract	Please provide the currency of payment to suppliers (for example, USD, Euros, etc.).	
	Effective Date of Pricing	What is the expected contract start date for this material (for example, January 1, 2003)?	
	Price Adjustments	Will price adjustments be allowed? Ex. Material Price Fluctuations? Currency Fluctuations? Please provide details on current indexing and fixing of the material cost. Also, what are the adjustments when reaching over certain % +/- in raw price fluctuation.	
	Length of Supply Contract	Please describe the length of contract from award date (for example, 2 years).Please confirm contract period. 1 year seems to be too short to cover extra costs as certificate and tooling costs.	
	Chargeback for Non-Conforming Parts	How do you handle non-conforming products received from a supplier (for example, non-conforming products must be replaced within a set timeframe and non-conforming material removed from the buyer's site at supplier's expense)?	
	Service Parts	Does the material included in this bid require any service parts (for example, supplier must maintain adequate supply of service parts to meet annual maintenance requirements)?	
	Warranty	Please provide any warranty requirements.	
	Standard Purchase T&Cs?	Do you adhere to corporate standard Terms and Conditions, if they exist?	
	Documents Attached	"Enter the names of any separate documents that you will provide for suppliers. Please send them by e-mail"	
Ordering	Minimum Order Quantity	What is the minimum volume that you expect to require with each order (for example, full truckload quantities, 2000 pound minimum, etc.?)	
	Delivery Requirements	Please provide any delivery requirements (for example, Daily, Weekly, by rail or truck).	
	Lead Time	What is your standard lead time (for example, 4 weeks lead time)?	
	Drop-in Order Requirements		
	Estimated Annual Usage and Fluctuations	If you anticipate fluctuation in your volume requirements, how much additional volume must suppliers be capable of supporting to accommodate (for example, volumes fluctuate do to Buyer demand or seasonality by as much as 25%)?	
	Forecasting	How often do you provide and how long are your usage forecasts (for example, quarterly 6-month rolling forecast)?	
Production	Material Engineering Substitutions	Do you allow material substitutions for any parts? If so, what requirements must be met (for example, substitution allowed with prior	
	Outsourcing Primary Processes	Is outsourcing of primary processes acceptable (for example, "yes, but only with prior engineering approval")?	
	Outsourcing Secondary Processes	Is outsourcing of secondary processes acceptable (for example, "yes, but only with prior engineering approval")?	
	Product/Tool Design Capability Required In-House?	What requirements do you have for in-house design (for example, supplier must have full-time engineering staff capable of joint product redesign efforts)?	
	Service Requirements	What value-add services do you require of your supplier (for example, dedicated representative, design capabilities, testing capabilities, etc.)?	
	Continuous Improvement and Cost Reduction Initiatives	Please explain any continuous improvement or cost reduction initiatives you require of suppliers.	
	Tooling	Please provide overview of tooling requirements, ownership, etc. (e.g., Vendor owned tooling, tooling owned and provided by buyer). Do we assume correctly that all tools are paid by suppliers? Then isn't 1 year too short to cover extra costs for non-incumbents taking into account the	
	Traceability of Parts/Lots	Please describe your traceability and/or material certification requirements (for example, parts must be traceable by production lot to the manufacturer's plant of origin, etc.).	
	Part Per Million (PPM) Defect Requirements	Please indicate your PPM defect rate at the end of contract, as well as the beginning of the contract. For example: <100 PPM	
	Pre-Award Supplier Qualification	Please describe your supplier qualification process (for example, self audit, length of qualification process, supplier interview, etc.).	
	Sample / PPAP Requirements	Please explain your first article or PPAP approval process, if applicable.	
	Minimum Quality Requirements	Please explain any quality requirements for your supply base (for example, suppliers cannot exceed >500 PPM defect rate, etc.).	
	Quality Audits	Describe any quality auditing process that you use for your suppliers (for example, Quality audits are conducted annually)?	
Inventory	Inventory Management and Warehousing	Please provide details of your inventory management and/or warehousing requirements (for example, Kanban, Vendor Managed Inventory, dedicated or domestic warehouse, safety stock requirements, etc.).	
Shipping / Packaging	Shipping / Freight	Please indicate the Inco Terms for your quotations	
	Labeling Requirements	Please outline your labeling requirements (for example, bar-coding, items to be contained on labels, etc.).	
	Packaging Requirements	Please outline your packaging requirements (for example, specification-related, palletized, spools, recyclable packaging, weather-proof, etc.).	
Other	Other Requirements	Please provide details of any other requirements not defined elsewhere.	

The examples of the Cost Breakdown heading (the rest of items/ lots not included) for the finished product (cameras). The blue cells contain formulas the green cells need to be completed by suppliers:

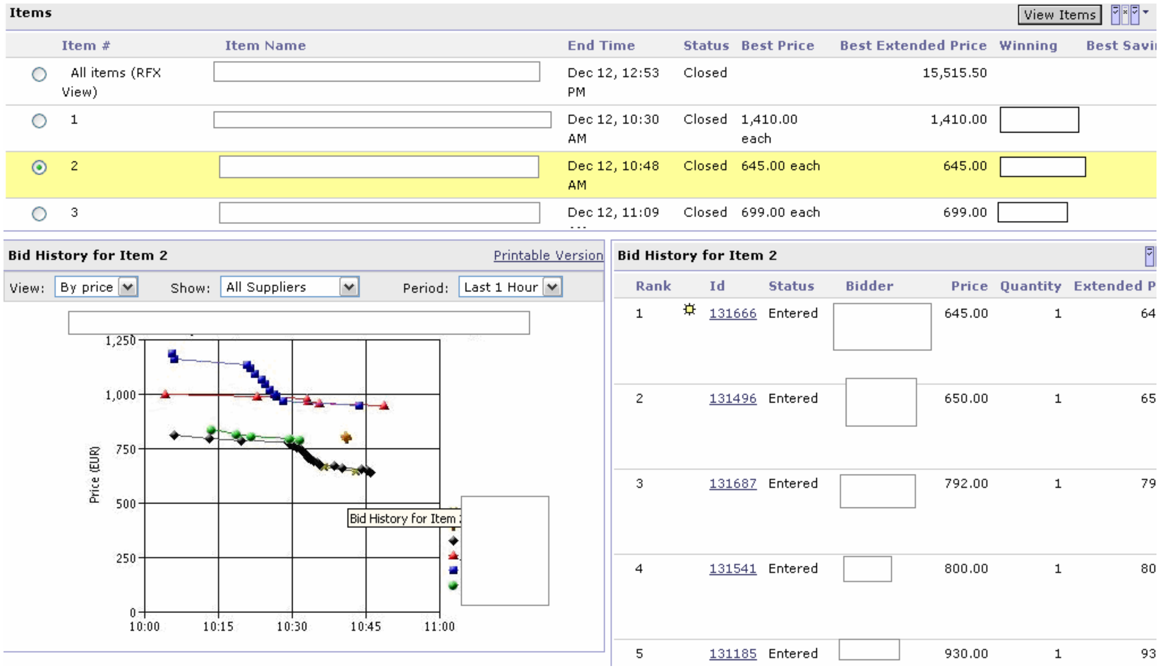
LOT #	LOT NAME	ITEM #	SPECIFICATION	DELIVERY LOCATION	DESCRIPTION	ANNUAL VOLUME (NUMBER OF UNITS)	PLEASE ENTER THE CURRENCY FOR YOUR PRICING	UNIT PRICE EXW		UNIT PRICE EXW GBP	EXTENDED PRICE EXW GBP	DDP COST ADDER	DDP COST ADDER GBP
1	Tube and bullet cameras	1	1	Brussels	Tube and bullet cameras	2750							

The example of the Cost Breakdown heading (the rest of items/ lots not included) for the component (in this case electronic one - PCBAs). The blue cells contain formulas the green cells need to be completed by suppliers:

LOT #	ITEM #	DRAWING NAME	PRODUCT	MATERIAL	RELATED DWG	CIRCUITRY DRAWING	SWITCH CONSTRUCTION DRAWING	ESTIMATED ANNUAL VOLUME 2007	MATERIAL COST	MANUFACTURING COST	OVERHEAD COSTS	PACKAGING COST	SUB-TOTAL (EXWORKS)UNIT PRICE	DDP DELIVERY COST (UNIT PRICE)	TOTAL UNIT(DDP) COST	TOOLING COST	DDP SAMPLE COST	TOTAL EXTENDED COST
1	1	XXX	XXXX	Plastic PES type Mylar foil. Frosted Surface	412824902BL1C.PDF	412824902BL3A.PDF	Plastic Dome switch construction	4600	0,00 USD	0,00 USD	0,00 USD	0,00 USD	0,00 USD	0,00 USD	0,00 USD	0,00 USD	0,00 USD	0,00 USD

3.4.5. Publishing of the tender, supplier negotiation & management

Now let's assume we have the text of the RFI and RFP drafted. In this phase I strongly advice to include the On-line bidding event / auction into the consideration. In fact my recommendation would be to always run it. The spend that shall go via this negotiation was analyzed identified in section 3.3. We can now proceed to publishing the RFI+RFP to the suppliers (in this the date of On-line bidding will be announced). I have been using Ariba software but there are other options as well (Trade Extension, IBM, Emptoris etc.). The benefits of using the software is that it is often impossible to send the full information packs by e-mail (size) and software provides more comfort in tracking the responses as well (automatic scoring, tracking of suppliers activity, downloading results). The main benefit of software is however the possibility of On-line bidding event. In this the suppliers get feed back on their rank (1^{st}, 2^{nd} etc.) and can lower their price within certain time frame (usually 30 minutes). The created market is usually very competitive with excellent results (see also section 3.1 on international suppliers that are often necessary for that). Sometimes the best price is displayed as well, however this I would consider too aggressive. Please see below the buyer view of the real On-line bidding event for transportation (identities covered).



Results of On-line bidding event for transportation (identity of bidders hidden) in Ariba software tool

In terms of sequence of the tender, first the supplier's RFP+RFI quotes are collected and checked if the suppliers covered all items as necessary so that they can go to on-line market. Then usually in 10-14 days the On-line bidding takes place (after the suppliers are trained). I must stress that it is not only the technology that creates the on-line market but first and foremost it is the good supplier management (in more strategically oriented tenders the suppliers in RFP/on-line bidding shall be visited. For strategically important suppliers the visits are essential). Also, absolutely clear and zero dubious conditions in RFI+RFP and On-line event are very important. If the buyer has no software tool available it is also possible to collect the bids by e-mail, give e-mail feedback on suppliers' rank and give suppliers the possibility to bid again. This is however much less effective in finding the bottom of the market.

The buyers shall never be hesitant in using the On-line bidding. As it is often the subject of prejudice as "Auction", too aggressive way of doing the competition etc. Sometimes the suppliers even could threaten not to participate in an On-line bidding event. There is nothing unethical on the way of conducting business like that and the suppliers can always be informed that they don't have to participate actively if they don't want to see their rank and prefer just to submit best and final. The competitive market shall always be sought and the internationalization / globalization of supplier base is excellent way for promoting that.

3.5. Run the total cost analysis and Implement the sourcing outcome

After the result of the tender the buyer shall take the RFI and pull the analysis of the quality of the companies (if they are new to him). Then he shall calculate the total cost (some software tools allow to calculate it in the on –line tender) for concerned suppliers (not for those with low quality score or high prices). By this he shall mainly take into account the transportation cost, cost of inventory (at his premises and in transport), taxes and duties (see chapters 3.4.1 and 3.4.2). Following the results of the total cost and auction, the pool of suppliers shall be narrowed and only few selected for supplier qualification process. For them the buyer makes the visit and conducts the on-site inspection. After that the final decision is made and supplier implementation process can start. This usually contains the confirmation of the technical specifications, agreement on the procedural aspects, integration into the invoicing system and other operational aspects. In the beginning of implementation the buyer requires to approve the samples before the start of serial production.[23] Once must be stressed and that is the credible approach towards awarding of the business meaning that the suppliers are notified about the procedure and deadlines which are then attained. If the buying organization is hesitant and overly bureaucratic/lengthy it puts the results of sourcing process at stake and could waste all the results from sourcing process.

4. Expansion on the foreign markets

4.1. Why to export/expand on foreign markets

The following are the common reasons for exporting the products/expanding on foreign markets:[24]

---

[23] This and other various approach at Institute of Supply management http://www.ism.ws/

[24] Internationales Marketing und Exportmanagment, Gerald Album, Jesper Strandskov, Edwin Duerr, Pearson Studium, 2001; Global Marketing Management, Masaki Kotabe, Kristian Helsen, John Wiley & Sons, Inc., 2000

- Intense competition and limited size of the domestic market
- Foreign demand
- The sales abroad help to reduce the cost of production of the product
- Diversification of business risks e.g. with regard to decline in demand on one market
- The Product cycle theory says that in the first phase the innovative product is developed for the domestic market; in the second phase the product is exported on the markets with similar demand preferences and income levels (similarly developed countries). The producer enjoys the economy of scale in production and marketing and very little competition. In the last phase the local competitors start to compete on the product. At this stage the cost competitiveness is the major factor and the original producer needs to think of establishing the local production (or cutting of the costs) in order to keep the market share.
- Economy of scale – exports reduce the fixed costs of administration, utilities, tools, research and development
- Possibility to better attack the competition and defend against possible attack on given market

4.2. General process of the market selection

The following is the suggested overall way of export market selection:

High level assessment, Geographical Selection & Market attractiveness
- overall economic indications
- prohibitive factors against the product (not allowing selling of the product)
- prohibitive factors related with the market (boycott, tarrifs)
- assessment of the market potential

↓

Socio-economic segmentation
Demand analysis
- Quantitative indicators
- Qualitative indicators

Supply analysis
- Competition analysis
- Distribution
- Media/advertising

↓

Assessment of the turn over potential
Markets
Segments

↓

Assessment of the profitability
Scale with Markets/Segments
Final Market selection

↓

Strategic Planning

Internationales Marketing und Exportmanagment, Gerald Album, Jesper Strandskov, Edwin Duerr

In the above chart the high level assessment of the country is the first step. After this more in-depth analysis and calculation of the potential profitability is conducted. Finally, the strategic planning of individual export activities takes place.

4.3. Risk associated with economic recession on the selected market

Now let’s ask the following question: What happens if the selected market gradually turns into recession or even economic crisis? The answer is simple - the investment into establishing of the position on the foreign market is seriously threatened or lost. Also, the loss may be deepened by the excess of inventory and production capacity designed for the saturation of the abroad markets. Examples may be the Argentina crisis in 90ties, Japan bust of property bubble in 90ties, Asian and Russia crisis in 1997, US Dot-com slump in 2000 etc. Adversely, the selection of the perspective market and presence on them may bring substantial and long term benefit to the company. Therefore, the right assessment of the economic perspective of the market and its identification is crucial decision in international strategy of the companies. Despite this importance some companies apply rather very simple approach. So e.g. Colgate-Palmolive views per-capita purchasing power as a major driver behind market opportunities. Nestle sees prospects in countries with population and buying power growth. McDonald's starts with countries that are similar to the United States in lifestyle, with a large proportion of women working, and shorter hours for lunch.[25] However, numerous examples of companies that had been caught in the slumping market and economic crisis are a good example that careful consideration about the market presence shall be done. Santander Central Hispano, Spain's largest banking group, lost nearly $3 billion almost immediately because of the Argentine peso devaluation.26 Australian farmers lost $1 billion due to Asian crisis.27 Due to the current US housing led recession Dell CFO commented that: "we have a large presence in the US market, so that obviously impact momentum on the top line"28. Due to Japan crisis and the addition of the Asian crisis, the vehicle sales in Japan were down 22.8 percent for the first two months of 1998 from the corresponding period one year ago. As a consequence Mitsubishi Motor Company, which had strong presence in South Asia, struggled in 1998 first annual loss in 24 years and suspended dividends (the financial problems stretched over a row of years). Other Japanese car makers were hit hard as well.[29]

4.4. Matrix on high level economic assessment of the market / economy

Below is my suggestion on the factors to look at and analyze within the high level economic assessment of the market / economy of a country in order to avoid presence / expansion on markets with signs of overheating or high prospects of risk in demand for

[25] Global Marketing Management, Masaki Kotabe, Kristian Helsen, John Wiley & Sons, Inc., 2000
[26] http://query.nytimes.com/gst/fullpage.html?res=9E02EFDB1439F93BA35752C0A9649C8B63
[27] Asia's Financial Crisis and its Likely Impact on Australia, Peter L. Swan, National Australia Bank
[28] Financial Times, Friday, April 4, 2008
[29] http://en.wikipedia.org/wiki/Mitsubishi_Motors and http://www.wsws.org/news/1998/mar1998/jobs-m14.shtml

company services/products. The result of the assessment shall be inserted into the Market portfolio analysis in chapter 4.5 where the other more micro elements are included.

External position of the economy
Trade balance This is absolutely crucial indicator in establishing the competitiveness and wealth prospects of the economy. The negative trade balance has often been early indicator of coming economic depression and sign of loosing of the competitiveness of the economy. The following are the numbers are averages from past crisis: Argentina $-10,2bn for years 1992-1999, Czech Republic $-16,9bn for years 1995-1998, Thailand $-28,1bn for years 1992-1997. One should also look at the dynamics of the trade balance. So e.g. the Russian figures were on average $+18,5bn for the years 1995 to 1999 but currently (2007) stand at $+128,6bn. [30]
Current account balance Consisting of International Trade Balance, Balance of Services, Balance of Incomes, Unilateral Transfers Balance, Capital Account and Financial Account. The main difference to the trade balance is that the current account balance covers more factors of the economy's external position. If the country runs deficit in trade and services and/or if the country's private and public savings are negative (current account deficit) it must compensate it with the inflow of capital from abroad[31]. When considering the current account in analysis of the market. It is generally negative if the country runs the deficit. However, exception may be if the economy is in transition and imports capital goods that will in turn strengthen the country's competitiveness. Also, if the economy can anticipate inflow of Foreign Direct Investments the strict view on deficit could be mitigated. The red alert for the market is if the current account deficit is high, i.e. >3 % of GDP and persistent for a long time and 1) caused by imports for private consumption, or 2) caused by investment into non-productive assets (e.g. houses, social transfers) or 3) caused by the consumer debt. The following are the numbers from past crisis: Argentina average of -3,5% of GDP for 1992-1999, Thailand -5,8% of GDP for 1992-1997 (similar figures for other affected Asian countries[32]), Czech Republic –4,4% of GDP for 1994-1997, [33]USA before the recession in 1987 -3,4% of GDP[34]. Again the Russian average of +0,89% of GDP from 1992 – 1998 must be seen in light of the current figure of +9,6% of GDP in 2006.
Export of raw materials The raw materials are important element influencing the wealth of the country i.e. the attractiveness of the market. Of course the extent it has on the wealth depends on the form of government and distribution of the ownership rights. Generally known are examples of poor countries that are rich in raw materials e.g. Nigeria. However, the fact is that if the country exports raw materials there will always be wealth to create attractive market. The question is only how numerous is the group that decides about /benefits from the raw material wealth. In well managed countries with raw material richness the whole country's economy shall be considered as attractive and stable markets. The example of such is Norway with its Government pension fund (oil wealth)[35], prosperity in Australia[36] or Canada[37] which is to a large extent based on raw material processing and export. The massive wealth and market in terms of raw material is Russia, where the income starts to flow into the economy thus creating a boost in demand. The times where the raw material

[30] http://www.dbresearch.de/servlet/reweb2.ReWEB?rwkey=u8992207
[31] Macroeconomic II, Milos Mach, Melandrium, 2001
[32] http://www.unescap.org/pdd/publications/adpj_11_2/5_bacha.pdf
[33] http://www.dbresearch.de/servlet/reweb2.ReWEB?rwkey=u8992207
[34] The US current account deficit : how did it come about and what are the policy implications, P. Butzen, E. De Prest, S. Ide, National Bank of Belgium
[35] http://www.regjeringen.no/en/dep/fin/Selected-topics/The-Government-Pension-Fund.html?id=1441
[36] WHY WAS – AND IS – AUSTRALIA SO RICH?, Ian W. McLean, University of Adelaide, School of Economics, Working Paper 2005-11
[37] Canadian National Statistics http://www.statcan.ca/english/freepub/16-002-XIE/2007003/10454-en.htm

has been the benefit of few are over. Now, with stronger role of the government, the raw material wealth makes the Russian market increasingly attractive with investments to development, infrastructure, housing, IT etc. set to grow by 2010 to $360 billion or 800% compared to year 2000[38].
Internal position of the economy
Household (consumer + student+ car+ mortgage) **debt to disposable income** (all debt/disposable income after taxes = debt-to income in %) Also known as **Household Debt Service Ratio** The % of the after tax household income to be paid to debt liabilities gives a good overview of the sustainability of debt. As the over-deftness has been the major cause of many of the past crisis (Asian crisis, Argentina, even the big economic depression in 30ties) and since over debt consumer demand is fragile (also often combined with overheated assets see below), the economy is vulnerable to the negative shock in demand combined with decline of asset prices and deflatory pressures. Also, logically the higher the debt ratio, the less the consumers are able to spend thus reducing their buy power. Therefore, the ratio of debt to income shall be closely and very carefully followed when considering the entry of the market. It is difficult to show the past evidence of this indicator as it has been monitored relatively recently (in US-FED from 1980). However, even on this US time scale we can observe the important trend. In 1980 the ratio started at 15.9 and went as high as 17.84 in Q2 of 1987. The recession knocked it down to 16.16 in Q4 of 1992. Since then the trend has been upwards to the current level of 19.32 Q3 07[39]! For comparison the ratio has exceeded the level of 20 (actually 21%) in Australia.[40] If the ratio is close to 20% it shall be considered very negative for the market attractiveness as this is the **average value** and there will be many families **spending significantly more** than fifth of income on their debt (e.g. in 2001 14% of the US homeowners paid 40% of their net income **only** on their mortgage let alone the other debts[41]). The sustainable ratio shall be seen around 14-15%.
Accessibility of debt to subprime lenders and excessive dynamics of mortgage and consumer debt There is no doubt that if the economy lacks the credit standards and credit is given "en masse" to borrowers with poor records (households, private business) such practices may result in serious disruptions in economy and thus create a mine field to the company's activities. As mentioned above the evidence shows that the bad debt was cause of the past economic crises be it German depression at the beginning of the decade and the current US subprime crisis [42], Japan crisis in the nineties and 2000[43], Argentine crisis[44] , Czech crisis of 1997[45] or even Big Economic depression.[46] The list could continue very deep into the past. Basically, the attractiveness of the market is susceptible if the credit is given to insolvent lenders. Insolvency is a financial condition in which a taxpayer's total liabilities (debts owed) exceed the total fair market value of all his or her assets (cash and other property). When looking at the market the following can be asked: is the credit accessible with easy and lax conditions to insolvent firms or households? or What is the dynamics and extent of this debt? Insolvent entities shall be called "zombie" firms or individuals that would normally go bankrupt but are subsidized

[38] http://en.rian.ru/business/20070928/81575923.html
[39] http://www.federalreserve.gov/releases/housedebt/
[40] http://www.theage.com.au/news/business/household-debt-hits-171-per-cent-of-income/2006/09/12/1157826927608.html
[41] http://www.marubeni.com/dbps_data/_material_/maruco_en/data/research/pdf/0407.pdf
[42] Article This is not merely a subprime crisis, Wolfgang Muenchau, Financial Times, 14 January 2008
[43] Japan's Deflation and Policy Response, Bank of Japan http://www.boj.or.jp/en/type/press/koen/ko0304d.htm
[44] http://assets.opencrs.com/rpts/RS21072_20030605.pdf
[45] http://www.cnb.cz/m2export/sites/www.cnb.cz/en/public/media_service/conferences/speeches/download/Singer_20061123.pdf
[46] http://econ161.berkeley.edu/TCEH/Slouch_Crash14.html
[47] http://www.chicagogsb.edu/capideas/sep06/3.aspx

by government (this was a case e.g. in Japan[47]) or by banking moral hazard as currently in the US (even if weakly justified by so called financial innovation such as securising of the debt).[48] The actual collapse of US asset back securities, and financial system in broader perspective, gives a very good example of a messy market that promoted overly easy access to the credit.[49] Very good indications of accessibility of debt to risk groups are the following factors and even more their combination: no down payment (on property), no verification of income and assets, interest rate only loans, negative amortization, teaser rates (artificially low at the beginning with clauses to steep increase in future), and loose standards for credit card debt.[50]
Dramatic surge in asset prices over the reasonable valuation (property, stocks). As it was case in many of the past crises (Japan, Asian crises, Big economic depression of the 30ties etc, referenced above). The crises common sign was the excessive appreciation of asset prices (often supported by shady lending practices) which after their crash led to deflationary pressures. The surge in house/share prices is accompanied with higher consumption, spending optimism and new instruments such as Mortgage equity withdrawal (for houses). Therefore, in the event of the slump the consumption follows and makes the market immediately significantly less attractive. Such state can persist in the economy for several years or even decade[51]. To avoid being caught in the overheated market the following can be observed: annual average gross income to house prices no greater than 5, the price of the average property / the monthly average rent shall be less than 200, house (house price / (rent-costs)) or share P/E ratio shall not exceed level of 20 (crises levels of 30+)[52], if the house prices are appreciating more than +3% above inflation for a longer period a more detailed examination shall be conducted (is the country getting richer by higher productivity, real wages growth, export, etc. or is the speculation involved).

[48] http://www.ft.com/cms/s/0/42827c50-abfd-11dc-82f0-0000779fd2ac,dwp_uuid=d355f29c-d238-11db-a7c0-000b5df10621.html?nclick_check=1
[49] http://www.financialsense.com/editorials/engdahl/2008/0208.html
[50] http://www.econ-pol.unisi.it/tonveronachi/Roubini_Worse%20than%20LTCM_9_9_07.pdf
[51] http://www.economics.ox.ac.uk/members/andrew.farlow/Farlow3June2005.ppt#302,8,UK House price falls and GDP falls
[52] Financial Crisis, Contagion, and Containment: From Asia to Argentina, Padma Desai, Princetown university press, 2003

Savings (% from disposable income and gross domestic savings to nominal GDP) The savings (both private and public) have the following important role in the attractiveness of the market: stability of the economic growth (capital/mean for financing of the development, positive impact on lower interest- for positive savings- rates are smaller and so is the dependence of the economy on the foreign financing) and basis for the sustainable consumption (the saved money can be spent!). The economies with negative or two low savings are again vulnerable to economic shocks with potential negative impact on the firm.[53] The gross national savings (S/GDP) shall not be dropping below 15 (levels of Argentina crisis[54]) and the savings from disposable income of households shall never be negative meaning that the household can maintain the current living standards only by borrowing without generation of the savings that have the above described stabilization role in the economy. The negative savings from disposable income occurred during the big economic depression[55]. I would see the value of savings/disposable income around 6% (most of the European countries). This means that people can maintain enough money to keep sustainable consumption. The higher the ratio is the greater opportunity to make people spend the available (!) money. However, for some countries with traditionally and culturally high savings ratios such as Japan or China (currently 50%[56] - huge potential of the market) the risk is how effective can the marketing be in changing the consumer mentality of people. As mentioned if the personal spending is stretched to maximum (around 0% or 1%), there is big risk that in combination of other factors the demand of consumers would shrink significantly thus creating the risk for the company. So e.g. the Australian parliament calculated that if the ratio would increase from very low current level of 1,3% by 2% to 3,3% (from 1961 to midd-nineties it was always above 5% peaking of above 20% in 1981) the increase of consumer spending would go down from 3,5% to 1,4% and reduce the contribution of consumption to GDP from more then +1,8% to +0,8%[57]. This underlines the hypothesis that higher savings ratio and high savings in the economy imply attractive market with less risk more potential. The Czech Republic and the booming consumption in the last decade is great example of that (the personal savings ratio declined from very high and attractive level of above 14% in 1995 to more than 6% in 2006). Those firms which recognized the potential have profited tremendously. On the other e.g. the retailers in UK and US are starting to feel the heat of declining market with no reserve in consumer spending[58]. The response should be to liquidate or reduce the positions in these markets as soon as possible.
Share of manufacturing on the GDP, industrial innovation, employment in manufacturing/industry, % of technically educated people The countries/markets with internationally competitive manufacturing sector, high innovation potential and high percentage of technically educated people have the strong foundation of the economic growth which is sustainable and based on creation and marketing of productive value. The industry is catalyst for further innovation, application and demand. Countries such as the US and UK have recently embarked on path of reducing of their manufacturing sectors. This has had the immediate effect on their current account deficits and weakening of their currencies. However, the countries with robust and competitive industry sectors such as Germany or Singapore[59] seem resilient towards recessions and sharp drops in the demand. The recent growth of wealth of China and other Asian countries can mainly be attributed to manufacturing and industrial sectors (manufacturing export). The

[53] http://www.czso.cz/csu/2002edicniplan.nsf/p/1510-02
[54] http://earthtrends.wri.org/text/economics-business/variable-588.html
[55] http://www.msnbc.msn.com/id/11098797/
[56] http://www.uschina.org/info/chops/2006/economy.html
[57] http://dsp-psd.pwgsc.gc.ca/Collection-R/LoPBdP/EB-e/prb0349-e.pdf
[58] Financial Times, 4 January 2007
[59] Singapore's manufacturing sector 1995 – 2005, Nah Seok Ling, Economic planning board http://unpan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN024567.pdf
[60] http://www.czso.cz/csu/2007edicniplan.nsf/p/1101-07

massive growth of wealth and demand in new EU-states such as Czech Republic is also driven by exporting industries and industrial investment[60] (in Czech rep. the industry share on GDP is around 40%[61]). Ideally, the share of the industry on GDP shall be around 30% (German level) but the current level of the USA - 14%[62] and even more alarming of Australia - 11%[63] are highly unsustainable and thus reducing the attractiveness of the market. Establishing of position on the market with strong and competitive industry reduces the firm's risk of the sharp fluctuations in demand for its products/services.
Personal disposable income per income per capita In order for the market to qualify as attractive there must be consumers that have enough money to buy products and services. I suggest the following definition: When country's per capita income is less than $5,000, much of the income is spent on food and other necessity items and very little disposable income remains. When it reaches $10,000 and more people have considerable purchasing power.[64] Not only shall the absolute figures be looked at but the dynamics as well. So e.g. China is growing from low levels but with very fast rate of around 10% annually.[65]
Country's population IQ Even though it may seem too simplistic and strange the IQ of the country is also something to take into account[66]. From the first look it is clear that countries from the top rank are more stable, richer, and produce much higher added value and thus have an interesting potential. On the other hand the counties with deficiencies in this indicator are less stable, poorer and much more unpredictable. In general they lean towards simplistic and undeveloped society that has no aspiration to change towards modern, consumer oriented structure. If the modern value in economy exist (usually from the past) such nations are generally great in wasting it. Attaching the importance to this indicator could for e.g. eliminate exposure to countries like Ghana (recent looting and violence) – average IQ of 72 ranking 70 out of 81 countries or to disastrous example of decline of market in Zimbabwe – average IQ of 66 ranking 77 out of 81 countries. The last places of Ethiopia and Equatorial Guinea (Africa) speak for themselves.
Political stability & independence For any business operation is important that the legal system guards the basic principles such as ownership rights are applicable in the same measure for everybody. However, when considering the investment and presence in international markets it is also important to de-code the sustainability and stability & independence of the present political establishment as the political disruption can cause the economic downturn and losses. Historically, the big changes led to economic losses (French revolution 1789, Russian revolution in 1917, Decolonization such as nationalization of Suez or African instability, both world wars etc.). On a smaller scale many of the recessions had also political roots - e.g. in Argentina (government over spending and malfunctioning). **Top-Elite vs. the population desire** – the risk is e.g. rule of super riche royal families in Gulf area with frustrations of population and rest of the population; past example could be the US imposed rule of elite in Iran followed by population's Islamic revolution. **Massive Corruption** is A) hampering the equal competition, B) adding unpredictability C) increasing cost and anger within population thus reducing the stability (The deteriorating example of countries like Ukraine speak for itself. However, one shall not only look at the less developed countries. Recently, the USA has been crystal clear example of corruption in e.g. the Iraq so called “reconstruction”). **Weakness or reliance on foreign military presence/support** – the systems based on military backing or other support of the political elite in hostile countries have always failed (communism in Czechoslovakia, South

[61] http://www.czso.cz/csu/2007edicniplan.nsf/t/D800445FB9/$File/110107s1.pdf
[62] http://www.ita.doc.gov/media/Publications/pdf/manuam0104final.pdf
[63] http://www.brookesnews.com/071709manufacturing.html
[64] Global Marketing Management, Masaki Kotabe, Kristian Helsen, John Wiley & Sons, Inc., 2000
[65] http://www.uschina.org/info/chops/2006/economy.html
[66] http://en.wikipedia.org/wiki/IQ_and_the_Wealth_of_Nations

Vietnam in sixties, Iran in fifties etc.). **Government relative overspending** on projects such as wars or populist social programs can cause economic downturn. So e.g. the official State debt of the United States is approx. 60% of the GDP which seems normal but if we take the off-budget items such as future obligation of health care and pensions the debt is 500% of the GDP[67] and (!) this is not including the growing commitments from wars in Iraq and Afghanistan and lower revenues due to housing crisis (it is worth to mention that the debt default lead to the fall of the former USSR or property keen Ceausescu's Romania which during 1980's heavily "invested" the country resources to the construction of the Bucharest People's palace).
Unconstitutional rule/fraudulent practices – if the main legal constituency is avoided and manipulated, the impact on the stability of the market is not positive. The example of such unconstitutional act may be even the creation of the US Federal Reserve System and IRS[68] (the constitution is silent on the private entity like that). The example of the fraudulent behavior is the above described overspending or manipulation of economic statistics (see shadowstats.com[69]).

[67] http://research.stlouisfed.org/publications/review/06/07/Kotlikoff.pdf
[68] http://www.financialsense.com/fsu/editorials/deepcaster/2008/0125.html
[69] http://www.shadowstats.com/

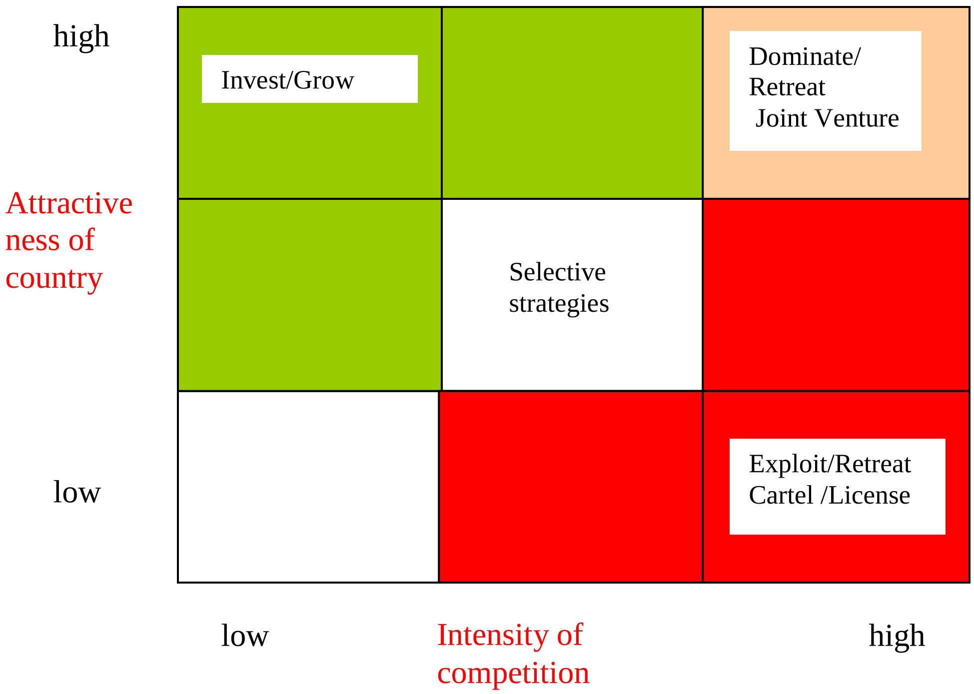
4.5. Market portfolio analysis

After the consideration high level economic assessment the Market portfolio analysis can be performed. The below Market portfolio analysis (except the economic assessment matrix) for countries is based on BCG approach (Market share + Market growth).[70] It divides the markets into four categories with specific strategies (Invest/Grow countries; Exploit/Retreat Cartel /License countries; Dominate/ Retreat Joint Venture countries and Selective strategies countries) based on Attractiveness of the country and Intensity of competition (see below the table for their determination).

Attractiveness of country	Intensity of competition
-**Market size** (total and segments) -**Market growth**. Let's take the example of mature industry such as paper. Per capita consumption in North America and Western Europe is around six hundred pounds. In contrast, per capita consumption in China and India is around thirty pounds. If per capita paper consumption in both China and India increased by just one pound over the next five years, demand would increase by 2,2 billion pounds, an amount that can keep state-of-art paper mills running at peak capacity. -**Market seasonal trends and fluctuations** -**Competition conditions** (concentration, intensity, entry barriers) -**Access to the country** (duties, time to complete the duties, import restrictions etc.) - **Your customers moved to the market** - Sufficient result in the high level economic assessment matrix from chapter 4.4.	-**Market share** -**Marketing capability and capacity** -**Suitable product** -**Possibility of coverage** -**Image** -**Technological position** -**Product quality** -**Support to market** -**Quality of distribution and services** -**Cultural proximity**

[70] Internationales Marketing und Exportmanagment, Gerald Album, Jesper Strandskov, Edwin Duerr, Pearson Studium, 2001

Below is the distribution of the strategies according to the strategies.



Below is the table with the **description of the strategies** according to the chart above:

Invest/Grow countries -activity for strong presence and substantial investments (including human capital, advertising, quality) -product development and modification for the market - foreign direct investment/sales branches/service stations are necessary to keep pace with other expanding competitors	**Exploit/Retreat Cartel /License countries** -realizing of profit, sale of the business -market share will be given up for profit – the timely management of cash flow is critical! -short time profits and liquidating of export positions -the pricing policy on short term effect – increase prices and reduce marketing costs - the position doesn’t have to be liquidated if cash flow generates profitable exports or more than branch costs
Dominate/ Retreat Joint Venture countries -difficult decision – long term negative cash flow in order to establish the position -if retreat the good prospects are lost -necessary to assess the financing requirements, internal resources and other factors	**Selective strategies countries** -good cash flow (cows) but difficult to be defended (especially if second or third competitive position) -tough competition - strategy of defense to keep the positions -If technological or other advantage – possibility to expand

4.6. Example of Ikea Market portfolio expansion

The "Intensity of competition" can also be paraphrased as "Ability to exploit the market" (low for the first one equals high for the later one). There is no doubt that by selecting the right approach the company can grow successfully. The below is such an example for Ikea's successful expansion:

Time Line of IKEA Expansion

1958 – First store in Sweden
1963 – Enters Norway
1969 – Enters Denmark
1973 – Enters Switzerland
1974 – Enters Germany
1976 – Enters Australia
1976 – Enters Canada
1976 – Enters Austria
1978 – Enters Singapore
1979 – Enters Holland
1981 – Enters France
1983 – Enters Saudi Arabia
1984 – Enters Belgium and Kuwait
1985 – Enters United States
1987 – Enters UK and Honk Kong
1989 – Enters Italy
1990 – Enters Hungary and Poland
1991 – Enters Czech Republic and United Arab Emirates
1992 – Enters Slovakia
1994 – Enters Taiwan
1996 – Enters Finland, Malaysia and Spain
1998 – Enters mainland China

Strategic Importance of Market	Low — **Ability to Exploit**	High — **Ability to Exploit**
High	United States (Beachhead*: Canada) China (Beachhead*: Taiwan and Hong Kong)	Germany France Italy UK
Low		Norway Denmark Finland

* For markets with high potential/difficult to exploit – incremental phased approach where the development of needed capabilities precedes market entry (lower risk opportunity to learn how to enter and succeed in the chosen strategic market)

The Quest for Global Dominance, Govindarajan Gupta, Jossey-Bass A Wiley Company

4.7. Mode and type of ownership of the entry to the market

As it was above when the market/country is assessed and selected for expansion, the mode and ownership of the mode of entry on the market shall be selected (with regard to the market attractiveness and ability to exploit the market/Intensity of competition).

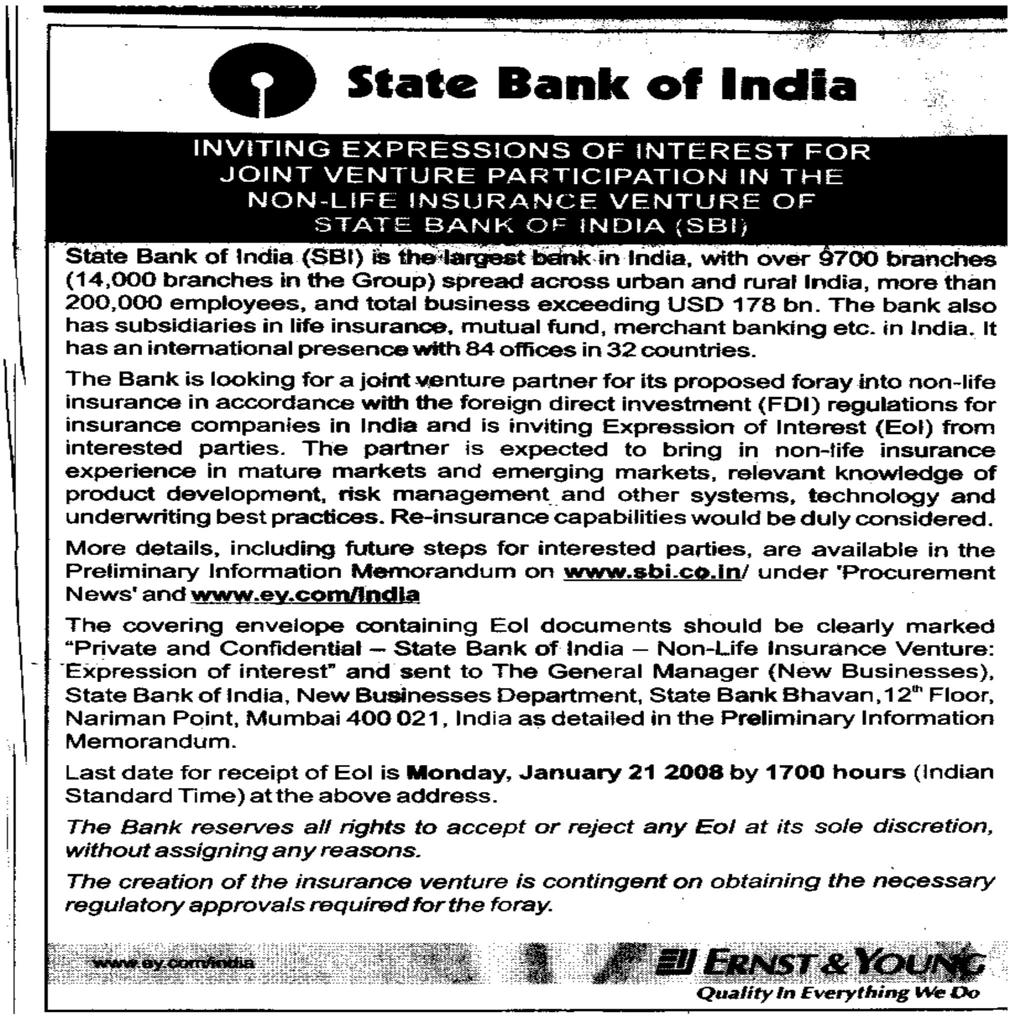
The below is the list of possible options that can be chosen[71]:

- **100% export of finished goods / exporting mode.** Low investment and consequently low risk/return alternative. This mode, while providing a firm with operational control, lacks in providing marketing control that may be essential for market seeking firms. Smaller firms without foreign experience are likely to have grater problems in managing foreign operations and they are therefore more vulnerable to this option. Also, it can be applied for less attractive markets with high contractual risk.
- **100% of local production and fully owned green field operations or acquisitions (100% ownership mode)**. High investment and consequently high risk/return that also provides a high degree of control to the investing firm. When company has unique know-how in business operations or product it may run the risk of loss of long term revenue if it shares this with the host country firms. Therefore, higher ownership may be more efficient. Also, this option is frequently used for high potential market and usually by big firms or multinationals that have already the international experience. The available strategies for this option: ***A) Acquire a dominant competitor*** (if there are good synergies and not inappropriate acquisition premium); ***B) Acquire a week player*** (good if it is possible to transplant the corporate DNA and business model and transform the weak player into a dominant one; useful also if the market is saturated and adding new capacity would only further sharpen the competition); ***C) Enter a poorly defended niche and expand from there*** (if acquisition too expensive/not possible). In 1970

[71] The Quest for Global Dominance, Govindarajan Gupta, Jossey-Bass A Wiley Company, 2001 and International Marketing Strategy: Environmental Assessment and Entry Strategies, Michael R. Czinkota, Ilkka A. Ronkainen, The Dryden Press Harcourt Brace College Publishers, 1994

the Japanese e.g. entered the US low end and started to expand from there (loose brick in the fortress); ***D) Stage a frontal attack*** (if competitive advantage is sufficiently large and can be leveraged outside the attacked market). E.g. Lexus's frontal attack on Mercedes and BMW in the US market succeeded mainly as a result of its overwhelming advantage in areas such as product quality and cost structure – Lexus enjoyed 30% cost advantage – given the high labor cost Mercedes and BMW faced in Germany.

- **Joint venture, affiliates (partial ownership modes)**. It involves relatively lower investment and hence lower risk, return and control commensurate to the extent of equity participation of the investing firm. Preferred by smaller firms in markets with high potential (but also big firms, e.g. Wall Mart entered Hong Kong in 1994 via joint venture). However, this is not preferred if contractual and investments risks are high (bad enforcement of law). Other reasons for opting for this option are: Physical, linguistic, and cultural distance between the host and the home country is high; the risk of asymmetric learning is low; the company is short of capital; Government regulation requires local equity participation. Historically, many countries with formidable market potential (Brazil, China, India, Russia) have been successful in imposing the joint venture option on foreign entrants (despite the 100% ownership would be preferred). The CFO of Merck said: "The beauty of a joint venture is the elimination of the risk and elimination of an acquisition premium. The downside is the complexity of managing the venture and having to share the pie." For advertisement on Joint Venture partner selection please see below for the add of State Bank of India.
- **Licensing/franchising (0 % ownership mode)**. This is low investment, low risk/return alternative which provides least control to the licensing firm.



State Bank of India

INVITING EXPRESSIONS OF INTEREST FOR JOINT VENTURE PARTICIPATION IN THE NON-LIFE INSURANCE VENTURE OF STATE BANK OF INDIA (SBI)

State Bank of India (SBI) is the largest bank in India, with over 9700 branches (14,000 branches in the Group) spread across urban and rural India, more than 200,000 employees, and total business exceeding USD 178 bn. The bank also has subsidiaries in life insurance, mutual fund, merchant banking etc. in India. It has an international presence with 84 offices in 32 countries.

The Bank is looking for a joint venture partner for its proposed foray into non-life insurance in accordance with the foreign direct investment (FDI) regulations for insurance companies in India and is inviting Expression of Interest (EoI) from interested parties. The partner is expected to bring in non-life insurance experience in mature markets and emerging markets, relevant knowledge of product development, risk management and other systems, technology and underwriting best practices. Re-insurance capabilities would be duly considered.

More details, including future steps for interested parties, are available in the Preliminary Information Memorandum on www.sbi.co.in/ under 'Procurement News' and www.ey.com/india

The covering envelope containing EoI documents should be clearly marked “Private and Confidential – State Bank of India – Non-Life Insurance Venture: Expression of interest” and sent to The General Manager (New Businesses), State Bank of India, New Businesses Department, State Bank Bhavan, 12th Floor, Nariman Point, Mumbai 400 021, India as detailed in the Preliminary Information Memorandum.

Last date for receipt of EoI is **Monday, January 21 2008 by 1700 hours** (Indian Standard Time) at the above address.

The Bank reserves all rights to accept or reject any EoI at its sole discretion, without assigning any reasons.

The creation of the insurance venture is contingent on obtaining the necessary regulatory approvals required for the foray.

www.ey.com/india

ERNST & YOUNG
Quality In Everything We Do

Example of joint venture partner search, Source: Financial Times, 4 January 2007

4.8. Specific of the local market / culture

Even though it may seem that the local culture is less important, the company shall never underestimate this aspect. So for example KFC’s expansion to Brazil failed completely due to the different taste/eating habits and abundance of local fast food opportunities. Cummins Engine faced difficulties in expanding with its diesel engines on the European market because the truck manufactures such as Mercedes Benz and Volvo are building their own engines. Best Foods introduced its Knorr Swiss soup in the US market based on the market test done on shoppers tasting the warm soup which was positive. However, sales were disappointing because the US consumers had strong preference towards the canned soups and not soups prepared from a dry mix.[72] Wall Mart in China was confronted with the fact that people do not buy in big quantities due to the space in their homes and responded with hybrid store combining a supercenter and warehouse club where membership were sold but nonmembers could also shop at “every day low prices” (plus 5 percent premium). Another experience of Wall Mart in China was that the buying of Chinese products was extended to 85% as a result of the government pressure thus pointing to another important factor that is the involvement of the local governments.[73] Based on the religious grounds Kellogg experienced thorough investigation of its products in UAE in 2002 that were followed by the ban of the products claiming that they contain the pork derivates.[74] Looking from the perspective of introducing a new product in the Asian countries and Japan the personal influences and selling tactics are very important. Because of the high context nature of culture, the presence of interpersonal relationships and the influence of significant third party members are very noticeable (more emphasis upon non-written communications). The low context nature of the culture necessitates the use of mass media advertising. Print media and direct mail are likely to be more effective in these countries. Because of the rapid rate of the diffusion, mass media advertising should be directed toward the innovator and early adopter. The Scandinavian countries, USA and Canada are examples in this category.[75]

5. Capital markets and the hedge against the global risks

The aim of this section is to address the most common risks associated either with buying the input or selling the output/output internationally. Also, I want to show the risks and benefits of participation of company on global markets. With regard to the risks from globalization it must be stressed that these concern not only the companies participating actively in the globalization but also companies operating purely domestically. Examples of such risks could be raising costs of production, raising cost of capital or foreign

[72] International Marketing Research, C. Samuel Craig and Susan P. Douglas, John Wiley & Sons, Inc., 2000
[73] The Quest for Global Dominance, Govindarajan Gupta, Jossey-Bass A Wiley Company, 2001
[74] International Management, Beamish, Morrison, Inkpen, Rosenzweig, MacGraw-Hill Education, 2003
[75] International Marketing Strategy, Environmental Assessment and Entry Strategies, Michael R. Czinkota, Ikka A. Ronkainen, 1994

competition that can eliminate their profit or position on the domestic market. The following aspects will be elaborated in more detail in this chapter:

- **Foreign exchange rate**. How to neutralize the risk from fluctuating currency.
- **Hedging against the rising cost of raw material, electricity and other inputs**.
- **Evaluating the impact of global competition on the business activities -** making the economic decision.

5.1. Foreign exchange rate

The risk of foreign exchange risk is the most common risk in international transactions. Below you can find some of the statements from the financial reports of the companies:

Foreign exchange losses were significant in the quarter due to the strengthening of the Canadian dollar versus the US dollar. At November 30, 2007, the period end rates used for the US dollar as compared to the Canadian dollar were 0.99 versus 1.0609 at August 31, 2007.[76]

2007 revenues were adversely impacted by the weak US dollar (approximately one third of revenues are denominated in US dollars), and by the transition of our revenue base. These effects were compensated by the acquisition of Intersources in August 2007. (Note of author: The cost of currency fluctuations around €1M in 2007).[77]

In 2002 we are financially stabilized despite the losses caused by strengthening Czech crown in first half a year. This had lowered the revenue in CZK and the added value of the company.[78]

Sony, which earns more than three-quarters of its revenues from foreign markets, loses Y6bn ($58.5m) for every one yen rise against the US dollar (according to Mr. Chubachi, president of Sony). Sony said at the time of its third-quarter earnings that it would miss its pledged 5 per cent operating margin target for the year primarily because the rapid appreciation of yen.[79]

[76] Rutter Inc. First Quarter Financial Results at http://www.newswire.ca/en/releases/archive/January2008/14/c8909.html
[77] Cc-hubwoo financial results from www.cc-hubwoo.com
[78] said Mr. Frantisek Chowaniec, CEO of Nova Hut, http://web.dbm.cz/dbmweb/actions.nsf/0/EE0FB344A63F1FA4C1256C37003A165B?OpenDocument
[79] Financial Times, Friday, April 4, 2008

The above is just short example of how some of the companies suffer from the exchange risks if they stay "naked" in the market. However, one should feel no mercy with them. It is only the pure incompetency of the management that is not being able to sterilize the future cash flow in different currencies.

5.1.1. Steps in establishing the foreign exchange hedge

There are basically three ways of establishing the hedge of the currency fluctuations. The first is to lock the exchange rate/eliminate the risk at the beginning of the transaction by FOREX account spot transaction, future/forward contract, options. The second one is to evaluate the basic currency fundamentals and take decision whether to hedge (the currency of receipt is overvalued) or not to hedge (the currency of the receipt is undervalued). This in fact equals foreign currency speculation. The third way is to neutralize the income in foreign currency by liability payment arising from purchase of input (e.g. raw material) or payment of interest on the debt denominated in the currency of receipt. While approaching the currency hedge the company shall, in my opinion, always seek to manage it with its own resources as nowadays the access to advanced trading possibilities and e-platforms is vast and cheap and the domestic offer of the banking system is overly expensive with its services while providing no real value in exchange. The situation is similar as with trading of the shares where one order with the "best" Czech provider FIO costs 7,95 USD[80] and the same is offered by Interactive Brokers for only 1 USD! After all, the problem is not as complex as it may seem.

5.1.2. Hedge with FOREX account spot transaction

Open an FXTrade account, deposit margin capital of, say, $5,000, and buy, e.g. 108,000 EUR/USD today. Then, sell 3,000 EUR/USD whenever a 3,000 EUR/USD payment is due. All transactions can be completed over the Internet using a standard Web browser, and no calls to a bank are necessary. The trades can be executed at any time, 365 days a year. The cost of hedging is the cost of the spread, which is typically 1.2 pips or less than

[80] www.fio.cz

$20 for the example scenario. The disadvantage is that proper margin / minimum account limit must be maintained at all times.[81]

5.1.3. Buying future contract

Let's see the following example[82]. It is January 14 and SPC Communication has 43 million New Zeland dollars (NZ$) payable in six months. The treasurer is concerned about strengthening the NZ$ in the next six months. The situation is the following: **January 14 spot market** (Spot rate: $0.4310/NZ$, September futures 0.4325/NZ$, Price per 100,000 NZ$: $43,250). The treasurer buys 430 September futures contracts. **July 14 spot market** (Spot rate: $0.4370/NZ$, September futures $0.4380/NZ$). He buys 43 million New Zealand dollars at $0.4370/NZ$ = $18,791,000 (the originally expected payable). He sells September futures at 0.4380/NZ$ = 430 x 43,800. **The result is as following**: Loss in the spot market ($18,791,000 (converted with the 14 July spot) – $18,533,000 (converted with Jan 14 spot)) = -258,000 (the treasurer is paying the NZ$ out – he wants low usd value). Profit in the futures market: 430 x $43,800 (Jul 14 forward price) – 430 x $43,250 (Jan 14 forward price) = $236,500. Net loss: - $21,500. The hedge proved to be prudent in eliminating 91.67 percent of the exposure (236,500/258,000). Had the foreign currency weakened against the treasurer's expectation, the spot market gains would have been nearly offset by losses in the future market as futures would have been covered for loss.

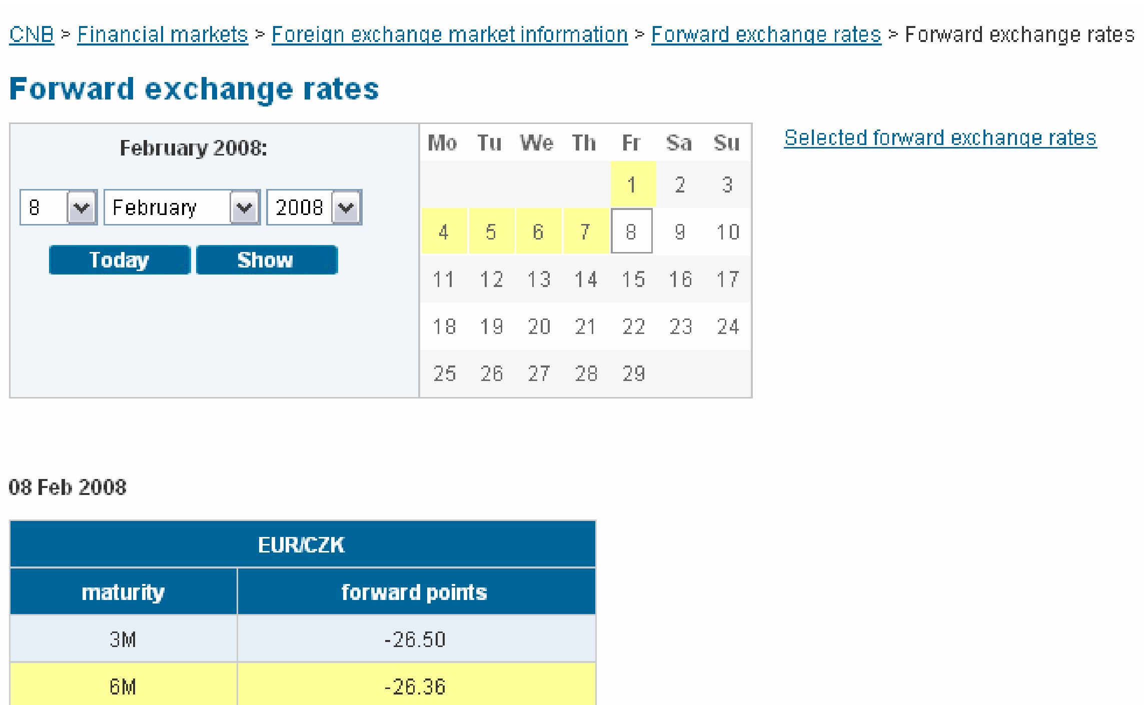
5.1.4. Buying forward contract

Following is the example on **forward** hedge[83], which may be even simpler than buying the future. Sam Nissan, a major car dealership has sold 1,000 units of the Altima produced in the Smyrna, Tennesse, plant to a British importer in Birmingham, England. The cars were shipped on October 30, 2001 and the importer has agreed to pay £10 million in January 2002. The **hedging strategy of the seller was to sell £10 million**

[81] http://fxtrade.oanda.com/whyfxtrade/hedging_for_companies_primer.shtml#forwards
[82] Managing Global Financial and Foreign Exchange Risk, Ghassem A. Homaifar, John Wiley & Sons, 2004
[83] Managing Global Financial and Foreign Exchange Risk, Ghassem A. Homaifar, John Wiley & Sons, 2004

forward at bid rate of $1.4785/pound. Sam Nissan will be ensured that its total receivable is $ 14,785,500. This will not change no matter how the currency fluctuates (in favor or against).

The forward rate hedge can be purchased at surprisingly low levels. To demonstrate it please see below for the forward rates announced by the Czech National Bank on Feb.8, 2007. The closing rate on that day was 25,660 CZK for EUR. The forward exchange rate is calculated by dividing the forward points by 1000 and adding the result to the spot rate.[84] In this case it means the effective forward rate for 6 monts is 25,63364 CZK for EUR. The forward cost of hedge against the spot is only 0,1%. Therefore, to obtain the hedging by forwards the firm shall only open account by one of the forex traders that offer this kind of service, e.g. Easy Forex (the link gives ilustrative example of forex trade).[85]



Below are other EUR forward rates are displayed in the table from Financial Times[86]

[84] http://www.cnb.cz/en/faq/faq_o5.html
[85] http://easy-forex.com/au/GuidedTour/forwards.aspx
[86] http://markets.ft.com/ft/markets/researchArchive.asp?report=ESP

EURO SPOT FORWARD AGAINST THE EURO

Feb 8		Closing mid-point	Change on day	Bid/offer spread	Day's mid high	Day's mid low	One month Rate	One month %PA	Three months Rate	Three months %PA	One year Rate	One year %PA
Europe												
Czech Rep.	(Koruna)	25.6700	-0.0350	550 - 850	25.7520	25.5480	25.6630	0.3	25.6533	0.3	25.6783	-
Denmark	(DKr)	7.4524	-0.0003	522 - 526	7.4572	7.4490	7.4529	-0.1	7.4540	-0.1	7.4605	-0.1
Hungary	(Forint)	265.370	1.8450	260 - 480	266.320	262.650	266.112	-3.4	267.702	-3.5	275.829	-3.9
Norway	(NKr)	8.0170	-0.0438	150 - 190	8.0513	8.0086	8.0260	-1.3	8.0469	-1.5	8.1512	-1.7
Poland	(Zloty)	3.6175	0.0121	165 - 185	3.6232	3.6021	3.6209	-1.1	3.6294	-1.3	3.6856	-1.9
Russia	(Rouble)	35.8890	-0.0272	809 - 970	35.9297	35.8230	35.9114	-0.8	36.0362	-1.6	36.6213	-2.0
Slovakia	(Koruna)	33.5525	-0.0775	420 - 630	33.6611	33.3718	33.5528	-	33.5406	0.1	33.5078	0.1
Sweden	(SKr)	9.4063	-0.0265	047 - 078	9.4478	9.3964	9.4071	-0.1	9.4099	-0.2	9.4382	-0.3
Switzerland	(SFr)	1.6022	0.0027	020 - 024	1.6037	1.5972	1.6003	1.5	1.5962	1.5	1.5801	1.4
Turkey	(Lira)	1.7582	0.0145	555 - 608	1.7608	1.7294	1.7741	-10.9	1.8080	-11.3	1.9618	-11.6
UK	(£)	0.7449	-0.0021	447 - 450	0.7460	0.7426	0.7456	-1.2	0.7472	-1.2	0.7541	-1.2
Americas												
Argentina	(Peso)	4.5943	-0.0011	927 - 959	4.6023	4.5798	4.6044	-2.6	4.6278	-2.9	4.8213	-4.9
Brazil	(R$)	2.5583	-0.0052	576 - 589	2.5738	2.5339	2.5694	-5.2	2.5899	-4.9	2.7263	-6.6
Canada	(C$)	1.4455	-0.0202	449 - 460	1.4632	1.4417	1.4453	0.1	1.4446	0.2	1.4425	0.2
Mexico	(New Peso)	15.5822	-0.0877	778 - 865	15.6504	15.5682	15.6118	-2.3	15.6874	-2.7	16.0843	-3.2
Peru	(New Sol)	4.2180	-0.0121	156 - 204	4.2337	4.2070	4.1930	7.1	4.1734	4.2	4.1252	2.2
USA	($)	1.4497	-0.0007	495 - 498	1.4524	1.4501	1.4485	1.0	1.4455	1.2	1.4336	1.1
Pacific/Middle East/Africa												

Source: Financial Times

The major advantage of futures contracts over forward contracts is the existence of a liquid secondary market. As a result, futures contracts can be sold at any time on the open market and do not have to be held until their maturity date. Disadvantages of futures contracts for the purpose of hedging include: Face value of futures contract is fixed, e.g., British pound futures are sold in £62,500 and Euros are generally sold in lots of €125,000, a margin deposit must be posted and maintained daily, limited expiration times; and futures contracts involve not just a spread, but also a commission.

5.1.5. Evaluate the basic currency fundamentals and take the position

This approach is based on estimating the fundamental value of the currency exchange and taking decision whether no currency hedge will **not** be done (if the cash flow is transferred from fundamentally strong to fundamentally week currency) or **will be** done (the opposite).

Already in chapter 4.4 the negative impact of current account deficit was analyzed. As I think this is the major driver for the currency fundament in mid and long run I will elaborate more on this subject. Hofmaifar[87] states the following on current account deficit: "it can be harmful to the well-being of an economy if an increase in the deficit is used primarily to finance current, not future, consumption. In such a case, the resulting exposure to interest rate and foreign exchange risk can be devastating. So long as the imported capital is invested in increasing the productive capacity of a country where the cost of capital is less than return on capital, the deficit in current account is essentially a value-producing phenomena". Kruger[88] writes that in 1970's the countries in current-account surplus tended to have appreciating exchange rates, whereas those with in current-account deficit more often experienced depreciating exchange rates. Kruger also cites the Dornbusch and Fischer acceleration hypothesis when the traded goods produced in two countries differ. The exchange rate then becomes a terms-of-trade variable. If, for example, there were an increase in imports accompanied by a reduced domestic saving propensity, there would be an initial increase in the price of foreign exchange as the terms of trade depreciated; thereafter, the exchange rate would depreciate along a path (consistent with rational expectations) as assets were decumulated to the new equilibrium exchange rate. If the money supply increased, exchange-rate depreciation would continue, but increased real balances, wealth, and spending would lead to a current-account deficit and decumulation of real assets until the initial (real) equilibrium was retained. Under these circumstances, the main conclusion is same with Kouri's acceleration hypothesis: **A current-account deficit would be accompanied by currency depreciation** and conversely. Rodriguez, followed up on Dornbusch and Fischer and confirmed their hypothesis which he completed with the conclusion that in high capital mobility, a once-only disturbance in the trade balance would not be expected to affect the exchange rate unless it was **expected to persist**.

The macroeconomic identity (in the open economy) can be described in the following way: [89]

Y = C+I+G+X-M (Y – output/income; C – Consumption; I – Investment; G – Government spending; X – Export; M – Import)

---

[87] Managing Global Financial and Foreign Exchange Risk, Ghassem A. Homaifar, John Wiley & Sons, 2004
[88] Anne O. Krueger, Exchange-rate determination, Cambridge University Press, 1983
[89] Macroeconomic II, Milos Mach, Melandrium, 2001

Further we derive write for disposable income composing of Consumption (C) and Savings (S) the following:

C+S = Y + TR – TAt a T = TAt - TR (T – net taxes, TR – transfers, TAt – total taxes)

Then we can write:

C+S+T = C+I+G+X-M ---> X-M = S – I + T – G[90]

From the above we can derive that the deficit of current account can be caused by negative savings of private subjects or government or both of them. If the current account is in minus, the deficit must be financed by debt from abroad.

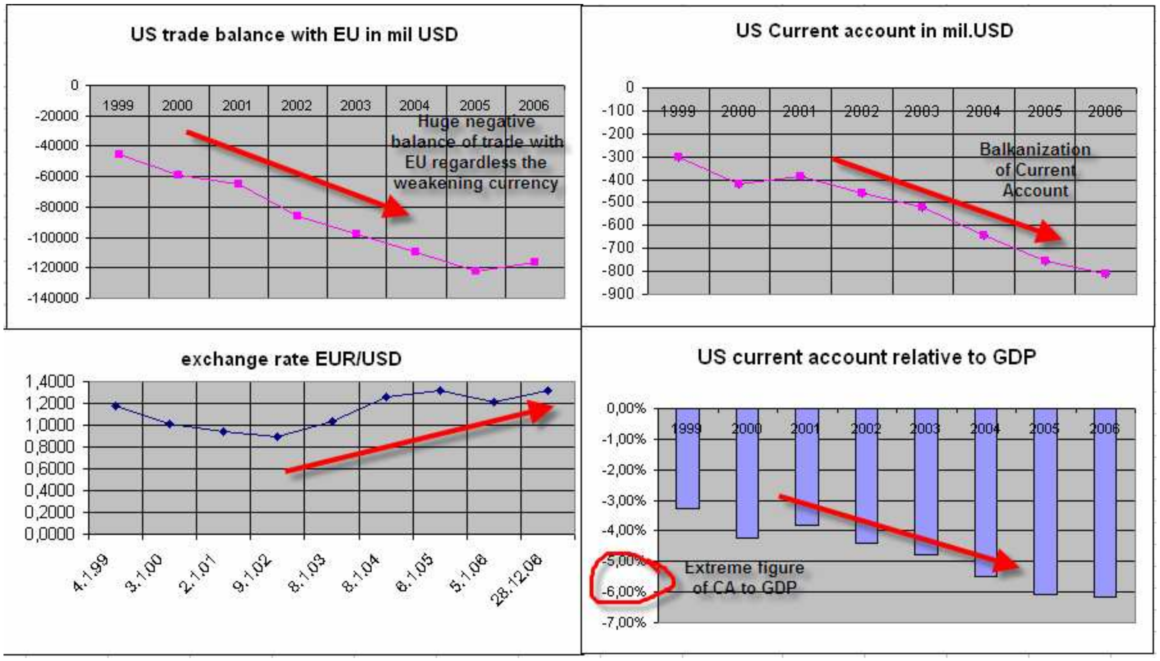
From the composition of the current account as stated in 4.4 the other dominant impact has the **balance of trade**. Based on the Ricardian Comparative Advantage Theory, which says that the countries shall specialize in what they can produce most efficient and then exchange with others according to the needs thus increasing the overall wealth, Kotabe concludes that one of the basic principal in foreign trade is that the exchange rates are determined primarily **by traded goods**.[91] He provides the following example: Price of desk is $900 in US and 2000 yuan in China. Based on labor productivity in the two countries (US 3 PCs for 1 desk and China 2 PCs for 1 desk) the price of a PC should be $300 in US and 1000 yuan in China. The US consumers are willing to pay as much as 3000 yuan (each PC for 1000 yuan) to import $900 desk from China. Similarly, Chinese consumers are willing to import a minimum of two PC (worth 2000 yuan in China) for each desk they produce. Therefore, the mutually acceptable exchange rate should be:

2,000 yuan <= $900 <= 3,000 yuan or 2,22 yuan <=$1<= 3,33 yuan.

Also, the role of FDI in the current account was explained in this section 4.4. Keeping in mind the importance of trade and current account, we can have a look at different scenarios for various economies. All the data used come from Source DB research[92] data and OECD[93] statistics and Kurzy.cz[94]

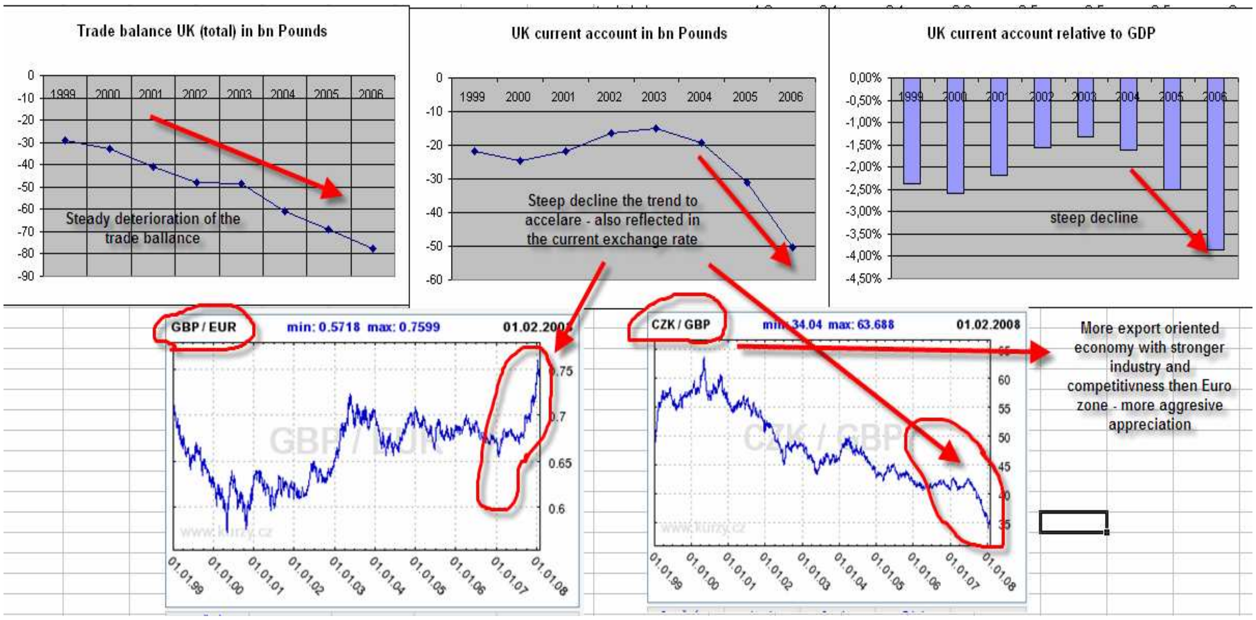
5.1.6. Euro zone vs. USD analysis

[90] Macroeconomic II, Milos Mach, Melandrium, 2001
[91] Global Marketing Management, Masaki Kotabe, Kristian Helsen, John Wiley & Sons, Inc., 2000
[92] http://www.dbresearch.de/servlet/reweb2.ReWEB?rwkey=u8992207
[93] http://www.oecd.org/dataoecd/62/43/38818788.pdf
[94] http://www.kurzy.cz/kurzy-men/



The trade balance with EU has been deteriorating by astonishing peace despite the weakening of currency. This confirms the assumption that the US has lost competitiveness and export capacity. In addition the economy is working with negative private savings and government deficit thus engraving the current account deficit. The prospects of excess government spending (Iraq and Afghanistan wars, social liabilities) and structurally unsound economy (housing bubble, little investment to productive assets, overspending and overdebtness) offer little prospects for change of the course. The central bank is not determined to strong exchange rate with preference to low interest rates. Also, the US money supply is running at extremely high rate. USD against EUR shall therefore be considered overvalued. If the company has USD cash flow to be transferred to EUR the “naked” position (not hedged) is not desirable at all. In the opposite case the not hedged position makes sense.

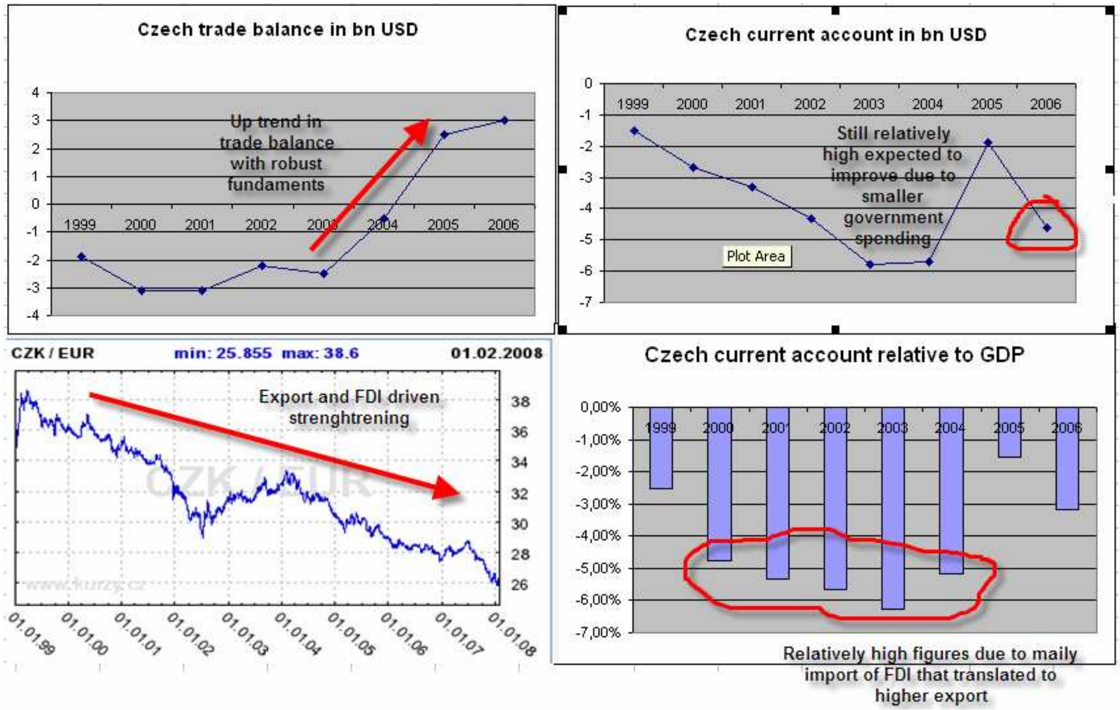
5.1.7. UK/Pound vs. to CZK and EUR analysis



The UK situation is relatively similar to the US situation. The trade balance is helplessly negative. Proportionally to GDP the current account is not as disastrous as US one but the recent speed of deterioration is alarming. If the US could have the worst decline probably behind it, the UK will get hit strongly especially with regard to the unwinding financial crisis that will reduce the unproductive and excessive banking sector95. Structurally, there is little prospects of improvements. The economy is suffering of housing bubble, industry is contracting,96 savings ratio is relatively low97 and people are deep in debt. If the company has GBP cash flow to be transferred to EUR/CZK the “naked” position (not hedged) is not desirable at all (GBP set to fall). In the opposite case the not hedged position makes sense.

[95] One of the analysis in The Wall Street Journal: UK’s role as finance hub turns into liability
[96] http://www.statistics.gov.uk/pdfdir/iop0106.pdf
[97] http://www.statistics.gov.uk/STATBASE/tsdataset.asp?vlnk=221&More=Y

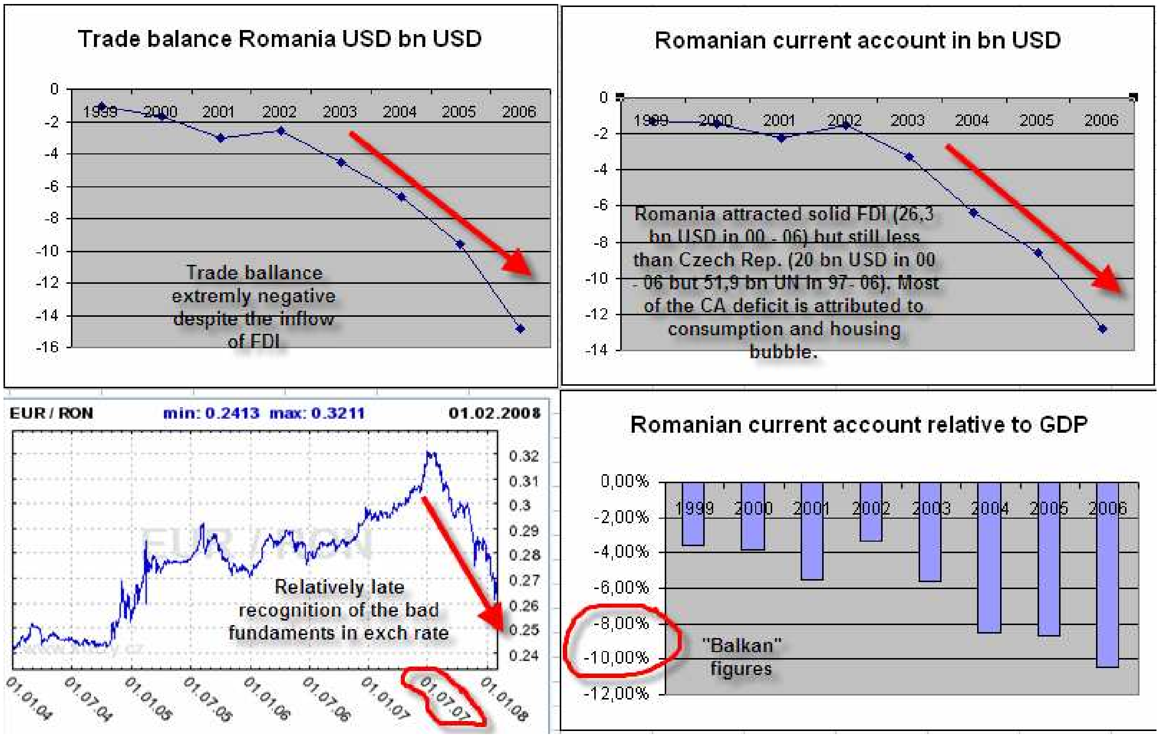
5.1.8. CZK vs. EUR analysis



The Czech economy is the example of strong economic fundamentals (high ratio of export industry on GDP, high savings, comparative advantages such as Purchasing Power Parameters – wages, cost of food, services- and favorable geographical position)**.** The trade balance underlines this fact. The spike in current account deficit in 2002 – 2004 is attributed mainly to import of FDI. This was only good for competitiveness and export capacity. However, some impact on exchange rate in these years can be observed. The trend in export surplus proves that correct. The prospects are positive. The indebtness of people is low, price level is lower than in Western Europe and there are no structural shocks like housing bubble (despite some signs of bubble market in places like Prague and Brno). The government budget deficit is set to decrease to 1,5% of the GDP in 2007 from the relatively low level of 2006.[98] If the company has CZK cash flow to be transferred to EUR the “naked” position (not hedged) makes sense. In the opposite case the not hedged position is too risky.

[98] http://www.patria.cz/Zpravodajstvi/1154525/cnb-deficit-verejnych-financi-letos-klesne-na-15-hdp.html

5.1.9. Romania/RON vs. EUR analysis



The impression that all economies in transition with low cost for labour and favorable purchasing power parameters, access to Western markets and high inflow of FDI should have strong appreciation against the EUR is misleading and Romania proves that. Despite the inflow of FDI the trade balance is extremely negative with dangerous tempo of deterioration. The current account is also at extreme level of -10% of GDP! The answer to that is that the country embarked on huge housing and consumption boom. The prices of some parts of the old city in Bucharest are comparable with Paris or London and every small town has a median housing price that rivalise with prices in similar cities from EU.[99] This with level of average salary around 350 EUR. The credit growth has been tremendous and the appetite for import of goods is coupled with it thus making the trade balance sharply negative. The efforts of central bank to cool down the boom resulted in

[99] http://en.wikipedia.org/wiki/Romanian_property_bubble

Financial innovation in which the credit is taken denominated in other currencies.[100] This is only aggravating the situation because with falling RON against the funding currencies (EUR, YEN) the default rates will shoot up. As highlighted above, recently the market realized the fundamentals and RON depreciated aggressively against EUR. In this case, if the company has RON cash flow to be transferred to EUR the “naked” position (not hedged) seems too risky. In the opposite case the not hedged position makes sense.

5.1.10. Neutralize the income in foreign currency by liability payment

Company can hedge the cash flows “naturally” by getting paid and pay the inputs (raw material, interests etc.) in the foreign currency. So e.g. the exporter ships the goods to Norway and accepts Norwegian kron for payments in 180 days. Therefore, he borrows (the capital that would be borrowed anyway) in the in the offshore banking facility Norwegian kron that matches the assets of the exporter (receivables) with the liability created by taking the loan denominated in the foreign currency. The receivable in foreign currency is used as collateral to secure a loan denominated in a foreign currency.[101] In order to find the offshore bank (or other financing institution or credit swap) the company can do own research or hire consultancy[102]. The other possibility is that foreign borrower issues the foreign bond issue denominated in the local currency of the buyer of the bonds (a “foreign bond issue”) or so called “eurobond issue” in which e.g. German borrower issues a dollar-denominated bond to investors in UK. However, this option is usually suitable for bigger companies as the company bears the legal costs (security regulations, information disclosures) and has to pay for the rating agencies and other cost associated with issuing of the bond.[103] The credit in foreign currency shall be especially considered if the interest rates in foreign currency are low (or lower relative to the domestic ones) and the company is generating income in this foreign currency. Example for that could be beginning of 2000 when there was great possibility to get cheap USD credit which could

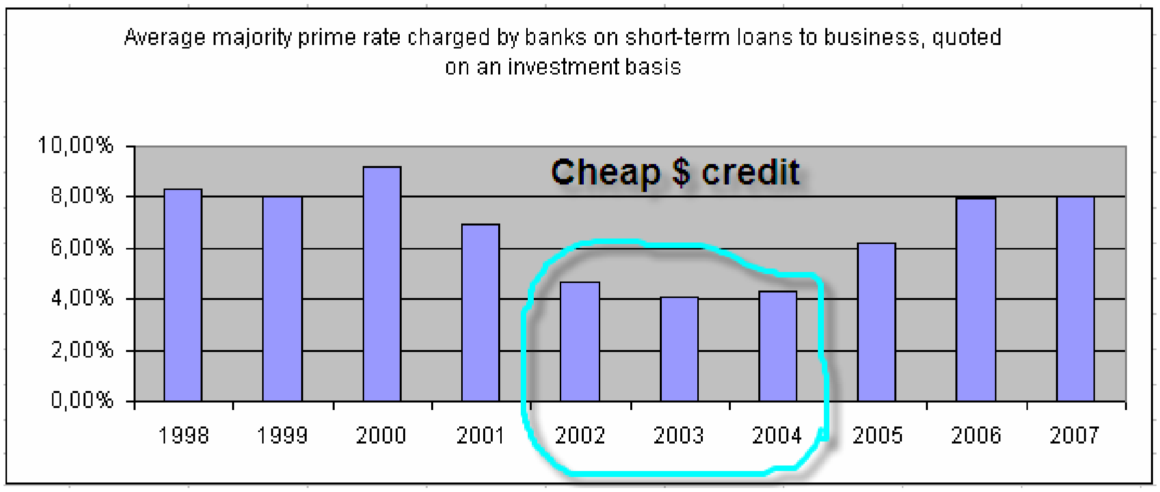
[100] http://worldbank.org/html/prddr/trans/July_September_2005/Too%20Much%20of%20a%20Good%20Thing.doc and http://reality.ihned.cz/c4-10005580-21445510-K00000_d-dluh-v-cizi-mene

[101] Managing Global Financial and Foreign Exchange Risk, Ghassem A. Homaifar, John Wiley & Sons, 2004

[102] http://www.wsr-corporation.com/en/financing.html

[103] Global Strategic Management, Philippe Lasserre, (INSEAD), Palgrave Macmilan, 2003.

serve as cheap financing and whose repayment could then be the hedge against the falling USD. Also, it should be kept in mind that often the global market can offer lower interest rates than the domestic one.

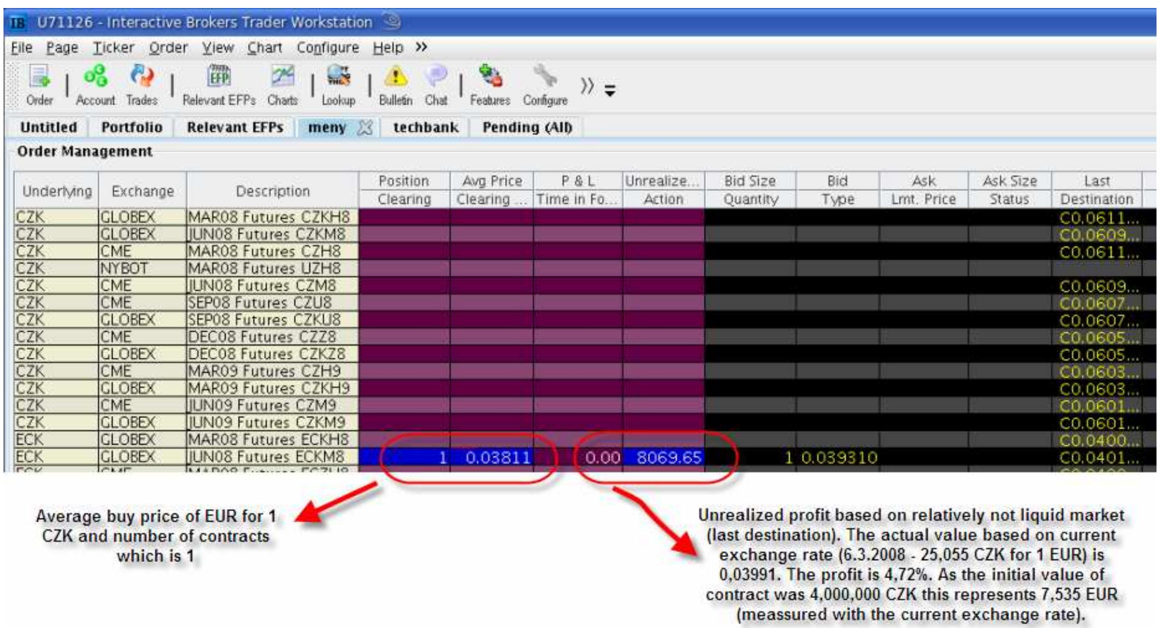


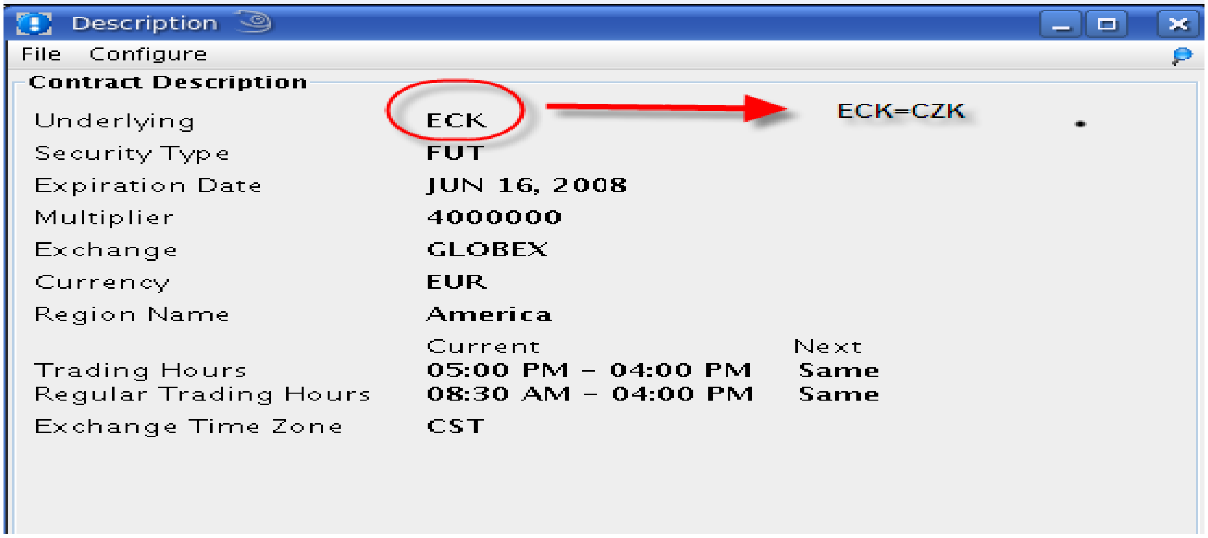
Source: Federal reserve database data

Probably the most easy and "natural" way of hedge for businesses is the purchase of raw materials (for other than USD countries) as these are usually quoted in USD and companies having the income in USD can pay for them without necessity to change the currency (more on hedging against the increase of price of raw material in section 5.2). However, companies could extend their natural hedge possibility by sourcing other inputs normally bought from domestic firms (see the sourcing chapter 3.4). Here the spectrum of commodities can be very large, ranging from office supplies to building material, depending on the spend of the company.

5.1.11. My way of currency hedge

To provide my example of currency hedge I was solving the following situation. In October I started working in Belgium for a private consultancy. In Prague I have mortgage on the flat. The net savings from salary to be transferred every month are expected at minimum 1,200 EUR. I intend to stay working for 1 year = future cash flow of 14,400 EUR. Based on the previous chapter 5.1.5 I clearly knew that the CZK is undervalued against EUR. I have the trading account at Interactive Brokers which is the world's nr.1 discount broker for shares and options. However, it is also possible to open the currency position. The only size offered for CZK and EUR was the futures contract worth of 4,000,000 CZK. As we had other EUR investment in the family we decided to jointly hedge it. However, the uncovered (speculative) size of contract still significantly exceeded the covered EUR equivalent in CZK (the incentive to undertake the speculative risk and leverage was the strong believe in the fundament of CZK and unwillingness to open separate FOREX account). The JUN08 expiration was chosen as the longest option offered in the first half of 2007 when the contract was opened. As of today (6 March 2008) the hedge has proven wise – profit of approx. 7,535 EUR is covering the income in EUR (hedge) and bringing additional profit.



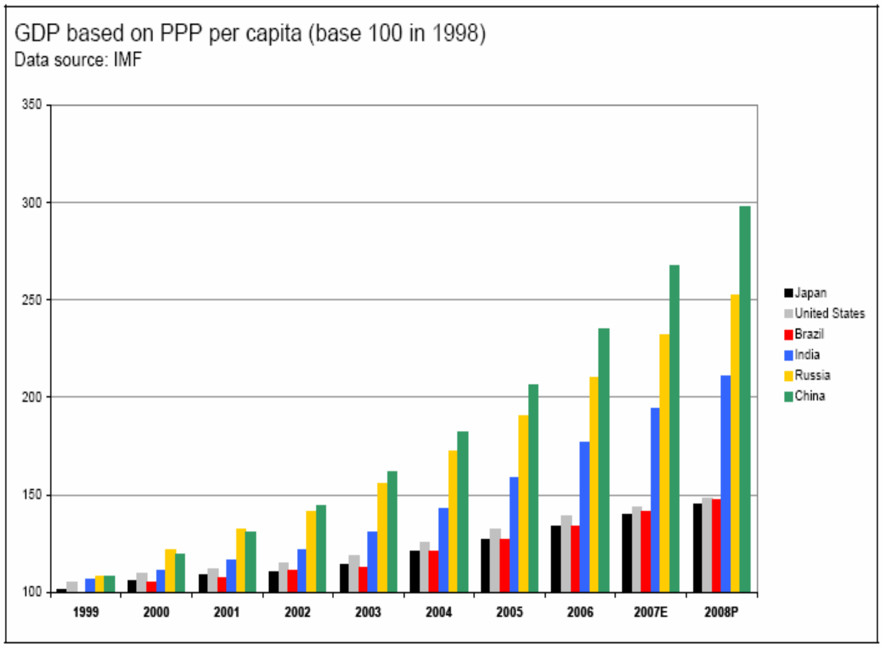


5.2. Hedging against the rising cost of raw material, electricity and other inputs

In terms of consumption and production of the raw materials the so called globalization brings the demand and supply to the next level. On the supply side the exploration and shipment is done all over the world. However, historically this is not such a difference. On the other hand the demand has grown dramatically as the new world regions industrialize and transform to consume societies while the demand in rest of the developed world staidly grows. Below are some highlights on the global demand & supply of commodities:

- In China there are something like 9 cars to every 1,000 people compared with over 900 cars per 1,000 in the US.
- There are 442 nuclear reactors in the world needing 180m pounds of uranium each year and in 2005 only 110 million pounds were produced. There are 28 new reactors being built and 34 planned worldwide.[104]
- The emerging markets are growing in terms consumption and income see below the chart on PPP per capita.[105]

[104] http://www.ft.com/cms/s/0/483d9e50-dfcd-11dc-8073-0000779fd2ac.html?nclick_check=1
[105] Commodities review 2007, ETF ltd. http://www.commodities-now.com/content/research/includes/assets/ETFReview2007.pdf



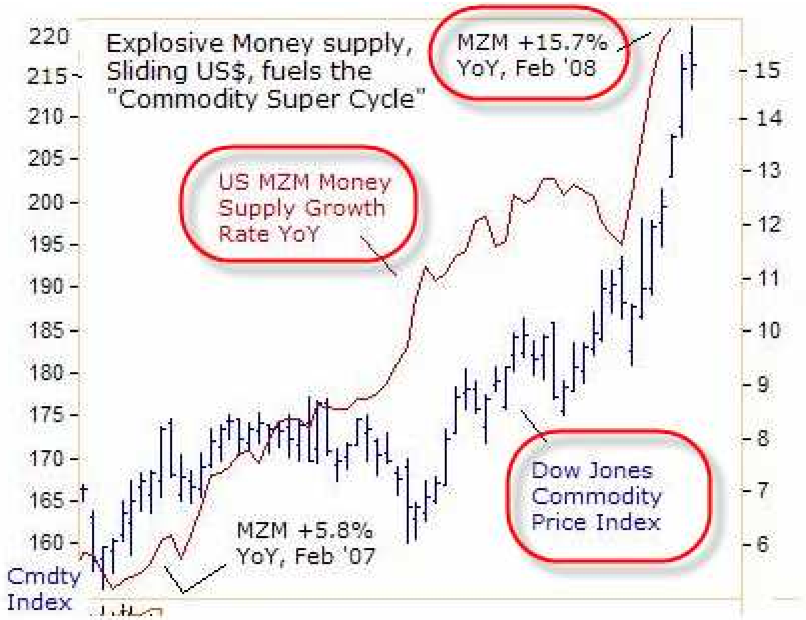
A purchasing power parity (PPP) exchange rate equalizes the purchasing power of different currencies in their home countries for a given basket of goods. It is used by the IMF, the OECD and other institutions to compare the standards of living between countries rather than a comparison at market exchange rates to correct for the relative price of local (non-traded) goods.

- China accounts for 20-30% of world’s base metal production and continued fixed asset investment underpins strong growth.[106]
- According to its official statistics – China absorbed roughly half the world's cement production last year, one-third of its steel, one-fifth of its aluminum and nearly one-fourth of its copper. Last year China eclipsed Japan to become the world's second-largest importer of oil after the United States.
- Hiring a giant freighter to run coal from Australia to Japan costs nearly $50,000 a day, up from about $20,000 in January 2003. [107]
- Mix of impacts has effect on Agro commodities – increased global demand, bio fuels farming or fluctuations in climatic conditions (e.g. extreme weather in US, Australia, Canada, China and the EU) are limiting the supply.[108] Logically, the governments are trying to impose export tariffs (e.g. Kazakhstan imposed 20% tariff on top-quality wheat export in February 08[109]) and the prices have been soaring to historically unseen levels (e.g. the palm oil, wheat etc.).

---

[106] Fitch Ratings: Base Metals outlook 2008. http://www.commodities-now.com/content/research/includes/assets/Fitch08BaseMetalsOutlook171207.pdf
[107] http://www.washingtonpost.com/wp-dyn/articles/A43765-2004May20.html
[108] http://www.bloomberg.com/apps/news?pid=20601012&sid=aBMHe0RYX57s&refer=commodities and http://www.bloomberg.com/apps/news?pid=20601012&sid=aIjNji7juC5Q&refer=commodities and http://www.bloomberg.com/apps/news?pid=20601012&sid=asonuhT6cYo4&refer=commodities
[109] Financial Times, February 26, 2008

- Study by the China Academy of Social Sciences predicts that the Chinese middle class would more than double in size to 520 million by 2020[110]
- The central banks have been expanding the money supply at fast peace (USD by 15,70% year on year!)[111] and thus creating the inflationary pressures. Even if the US economy grows by 0 and the Chinese / emerging markets slow by half, the demand for commodities would still be globally growing.[112]

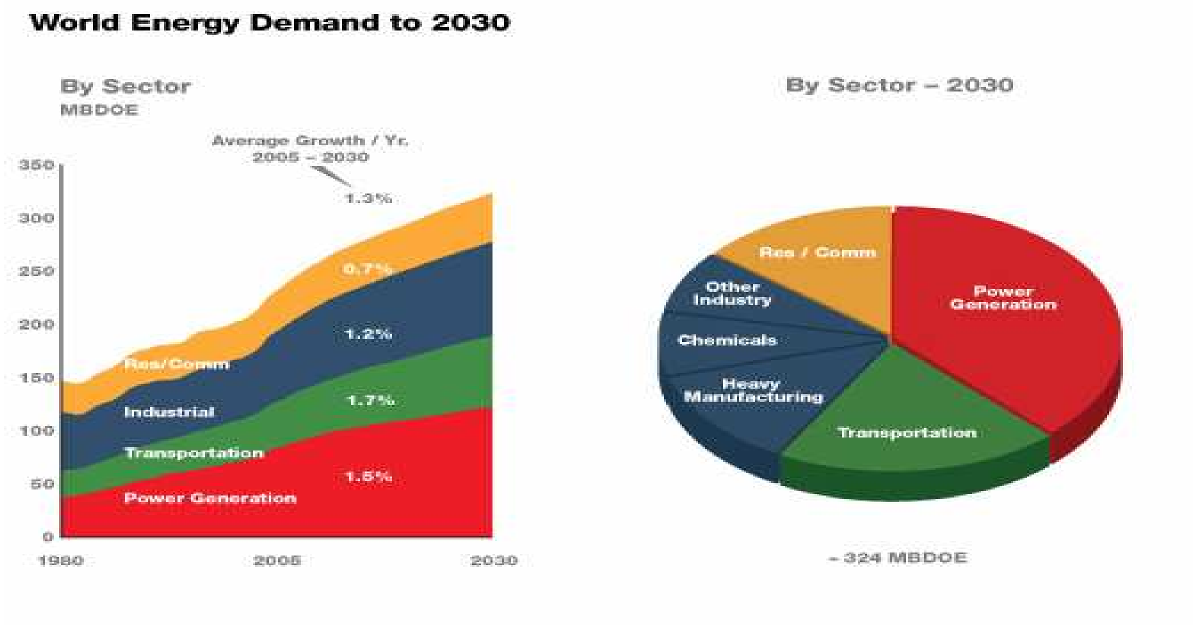


Source: Gary Dorsch, Financial Sense

- In the past 16 years, world electricity consumption increased 7.2 terrawatts. China, India, and the U.S. accounted for 52% of that growth. However, every other part of the world also shows strong growth. So, although the "Big Three" are the principal drivers, one cannot forget about the other 48% of the world that also wants their piece of the pie.
- The US production of oil and natural gas has peaked in seventies and is decreasing since then. The coal is projected to last for next 100 years.[113]

[110] http://www.kitco.com/ind/Saxena/sep182007.html
[111] http://www.financialsense.com/fsu/editorials/dorsch/2008/0307.html
[112] http://www.kitco.com/ind/Saxena/sep182007.html and http://www.financialsense.com/fsu/editorials/dorsch/2008/0307.html
[113] http://www.aspo-usa.com/index.php?option=com_content&task=view&id=180&Itemid=93

- The raw material deposits now under consideration are lower grade, more remote, deeper and in general more difficult than mines that operated in the past. There is also a great deal more political uncertainty, putting many areas of the world off limits.[114]
- In 2005, global primary energy consumption was approximately 230 MBDOE, comprised of fossil fuels — oil, natural gas and coal — plus other non-fossil energy, namely nuclear power and renewable sources. By 2030, energy demand is expected to reach almost 325 MBDOE, or approximately 40 percent more than in 2005[115]



The aim of this thesis is not to offer a possible way for determination of the commodities or electricity prices, as it was the case for currency exchange rates, since these price are also highly speculative and depending on a number of factors. However, based on the above evidence, I dare to say, that despite the price volatility the probability of the long term **increase in the raw material and electricity inputs prices** is **much more probable than the opposite development**. In order to avoid losses (see the table below), the company using some of the inputs in a greater extent shall consider the hedge against the price increase.

[114] http://www.kitco.com/ind/Resopp/roulston_jan122008.html
[115] http://www.exxonmobil.com/Corporate/energy_outlook_world.aspx

Whirlpool, Electrolux, Maytag, and General Electric each will increase large appliance prices 5% to 10% to cover higher bills for steel and other materials. (Business Week – December 27, 2004) Kimberly-Clark announces plans to cut $400-500 million in costs over three years to combat rising energy and pulp costs. (Reuters – July 22, 2005) The US auto parts industry has been hit hard by high costs for raw materials, such as steel. (Wall Street Journal – September 22, 2005) The skyrocketing price of jet fuel has forced American, Delta, and Northwest to cancel flights to conserve fuel expenses. (CNN – October 13, 2005)[116] The shares of Premier Foods (food and bread producer) have plunged 70% from beginning of 2007 as his finances and profit are squeezed by record wheat prices (Financial Times, 2008).[117]

The same logic shall apply to mining industry which should not bind itself to long term agreements and sell rather the output as spot (see the below table for example).

Canada's nickel industry was sold off (they sold the forwards, i.e. shorted their production) a couple of years back based on projections of nickel at $8.00 a pound. Soon after the sales were completed, nickel was as high as $24 a pound. The buyers of those companies were selling that Canadian nickel for three times what they had just paid for it. Even at the present $12, the foreign buyers are enjoying an enormous windfall profit. The Swiss company Xstrata and the Brazilian company CVRD didn't do this move and, on the basis of that, they have enjoyed much better prosperity and expansion.[118]

[116] Managing Commodity Price Uncertainty, Charles Tooman, Gary Germeroth, http://www.commodities-now.com/content/market-areas/general/ma-article-10.pdf
[117] Financial Times, February 26, 2008
[118] http://www.kitco.com/ind/Resopp/roulston_jan122008.html

5.2.1. Possible hedge strategies against the increase of prices

In the three below chapters the possibilities for hedge against rising prices of company inputs (raw material, electricity etc.) will be described. This namely concerns futures & options, vertical integration and defensive purchase of assets.

5.2.2. Hedge with financial instruments – futures & options

Pricing commodities futures follows the same principles as pricing other instruments explained for currency hedge. Commodities futures provide risk-avers individuals such as farmers, food processors, grain elevators, manufacturing, financial, and nonfinancial corporations the opportunities for managing risk and provide arbitrageur with a chance to make speculative profit. If the company buys the commodity futures (hedge against price increase) it locks the price of the commodity. Should the spot price (in the future) be above the initially bought future price, the company makes profit from the operation and thus neutralizes the price increase (of oil, wheat, nickel price etc.). In the opposite case the company makes loss in future contract. It is of course possible to speculate on decline of the prices too. Alternatively, the company can buy call option which would constitute the right to buy the commodity for the given strike price for the premium paid for the call option (the company pays premium for the hedge upfront as opposed to buying the future or forward and than follow the price movement). Similarly as in the currency hedge, the company shall never use the services of expensive financial institutions but open the account with international discount broker and thus gain the access to international markets (see the link in foot note).[119]

5.2.1.2 Hedge through vertical integration

The general rule is that every company shall concentrate on the core of its activities. However, the economic history and presence is full of examples of successful companies that strive the vertical integration in order to maximize their profit and leverage against the competitors. In many cases the vertical integration involves the securing of raw material resources.

[119] http://www.interactivebrokers.com/en/trading/pdfhighlights/PDF-FutureOptions.php?ib_entity=llc

Past example of vertical integration: Standard Oil Company an oil business in beginning of twenties

After Standard Oil Company break up (1911) the two newly formed and functionally different companies remained fully vertically integrated from crude oil exploration to marketing activities in their own outlets. Few companies matched that as they were separated as oil producers, transporters or marketers. But this has changed as in the decade after Standard Oil company ruling - the smaller companies grew through the vertical integration in order to catch and maintain the market share in the fast growing gasoline business. The investment by refineries in crude oil production emphasized the defensive nature of this strategy. Indeed, the Standard Oil was concerned that the entry of new smaller competitors to refining (Gulf, Shell and Taxas Corporation) and ever growing demand for petrol and petrol products would prevent it from buying the crude oil at reasonable prices. The refineries that integrated backward into crude oil were far more numerous than the crude producers that moved forward into refining.[120]

Current vertical integration: BASF[121]

The core business of BASF is clearly chemical industry. However, the group has wisely done the vertical hedge through fully owned subsidiary Wintershall. The company successfully operates oil fields and refineries in places like Libya or Caspic sea. Similarly, Wintershall is active in exploration and marketing of the natural gas (e.g. co-ownership of gas fields in Russia and the Nord Stream pipe project). Thus BASF has unique access to oil & gas and provides superb commodity rise hedge. The subsidiary delivered the biggest contribution to the Group's operating result in 2006.

Current vertical integration: CEZ[122]

The Czech power company has succeeded in full acquisition of Severoceske doly that is the largest brown coal miner in the Czech Republic. Thus the company has secured

[120] Scale and Scope: The Dynamics of Industrial Capitalism, Alfred Dupont Chandler, Harvard University Press, 1990

[121] http://www.wintershall.com/firmenprofil.html, www.basf.com

[122] http://www.sdas.cz

supplies for its near-by located plants and vertical integration for its main production input-coal that has been raising to record levels.

5.2.1.3 Hedge through defensive purchase of assets

Not only the big companies have the “privilege” of being hedged through the ownership of the assets of the input producing companies. There is the possibility to buy the shares of these companies and use the dividend payments and share increase as the natural hedge against the rising of the input prices from which these companies are benefiting. The counter argument, that the core of e.g. glass making company is different than the electricity or similarly that steel producer has best its capital invested in the steel making operation rather than in nickel mining, is not generally valid. Many of the input (raw material, electricity) producing companies are very well managed firms with excellent ROA, ROE and profitability and therefore they offer great opportunity for long term hedge. Of course, the final decision and evaluation always depends on the valuation which may be too high to undertake such move. The nice thing is that such possibility is open for all, including very small companies, or even households. The below is my self designed case of such hedge.

Spolek pro chemickou a hutni vyrobu[123] is one of the top three global producers of resins. Yearly it produces approximately 60 000 tons of resins. The other chemical plant that has similar production line – Lucebni zavody Kolin[124] – reports the consumption of 992 kwh/t of the chemical product. If we extrapolate this for the production at Spolek and multiply it with the cost of electricity for industry in the Czech Republic ($0,0512/kwh see the chapter 3.1) we come at 3,047,424 USD or 50,282,496 CZK (exch rate of $1=16,5 CZK). We can assume that this extrapolation is not so far from reality as the CEO of other industrial facility Krkonošských papíren (paper production – usually less energy demanding than chemistry) Mr. Jaroslav Jiricka put it: “If we hadn’t the possibility to substitute with the old mazut heating, the increase (increase of electricity of 14% and gas by 21% in 2005) of energy bill wouldn’t be in single million CZK digits, as

[123] http://www.spolchemie.cz/dwn/Hodnoceni_dopadu_2006.pdf
[124] http://www.lucebni.cz/main.php?action=o_firme&sub_action=detail&sm_id=7

we face it now, but in dozens of millions of CZK".[125] (Please note the accessibility of information on total electricity spending is very difficult to get as it is confidential information, therefore the extrapolation was done.)

Now we can make the backward looking simulation for Spolek if it had bought CEZ for the one year of its electricity bill at the beginning of 2006 (2 January 2006): share price 741.6 CZK, nr. of shares bought 67,802, the profit up to date (7 March 2008) 29,588,792 CZK (59%), dividend for the years 2005 – 15 CZK per share, dividends 2005 total: 1,017,030 CZK, dividend for the years 2006 - 20 CZK per share, dividends 2006 total: 1,356,040 CZK. So if the payments for electricity in 2006 increases for 7,039,549 CZK (14%) the company receives in 2006 1,017,030 CZK in dividend payments, the exposure to the electricity increase is 6,022,519 CZK. The other compensation is the increase of share price (2.1.2006 – 1.1.2007-959/share) of 14,740,155 CZK. Therefore, the company makes profit (8,717,636 CZK) on the electricity increase (measured against the exposure). The suggested method of the hedge would be the sale of 6,279 shares that correspond with 6,022,519 CZK. By this the company brings the 14% increase of electricity price to 0 and still makes the profit of more than 8 million CZK on the share development.

5.3 Sharpening of the domestic competition by global supply

In the chapter 4.7 we have analyzed various entry strategies on the market. Now, we shall look at the parameters that would determine the exposure of a business or sector to global competition. Obviously, if such a company doesn't change the course and doesn't adopt the management steps towards globalization (one can call it the hedge against globalization) it will eventually face decline in economic parameters or even bankruptcy (see the below box).

The traditional producer of high quality of socks in Czech Republic – Lonka went bankrupt as a result of the increasing Asian competition despite the quality of its products recognized by deliveries to Hugo Boss or Dutch military.[126]

[125] http://www.glassrevue.com/news.asp?nid=4395
[126] http://www.novinky.cz/clanek/117218-slavny-vyrobce-ponozek-lonka-jde-do-likvidace.html

Lonza – the Swiss biopharmaceutical contract manufacturer reported lower operating profit due to raw material increase and stiff Asian competition. In order to counter that, it plans to build large scale and pilot scale production capabilities the Guangzhou Nansha regions.[127]

The predatory strategies of Chinese suppliers of candles have led to a massive price decline as well as a significant reduction of the market share of European producers. Some producers have filed bankruptcy or reduced their production capacities.[128]

In Europe in 2006 and the beginning of 2007, plant closures (due to Asian competition) in paper industry amounted to between 5 and 10% of the capacities of the groups in question and 8% in packaging industry. The net earnings for the French paper industry have been in the red since 2005 at -32 million euros, -178 million euros in 2006 and an estimated -92 million euros for 2007.[129]

Divi's Laboratories, an Indian manufacturer of active pharmaceutical ingredients and advanced intermediates based in Hyderabad, "shocked" the Western fine chemicals world in the mid-1990s when it dedicated a 1,000-m^3 multipurpose current Good Manufacturing Practices fine chemicals plant in Hyderabad. The plant was built for the "ridiculously modest sum of $25 million. In EU or USA the bill for the plant would come at about $250 – 400 million. With one tenth of the labour cost, the company is competing against big companies such as Pfizer, Johnson&Johnson, Merc etc.[130]

5.3.1 Suggested steps for in strategy against global competitors

The company shall therefore undertake appropriate steps to challenge the global competition and hedge against it in order to keep and increase the economic prosperity. Namely I suggest the following:

1) Analyze the exposure / vulnerability of its activities to global competition. If identified as vulnerable to global competition the company shall swiftly undertake the steps below. However, these steps are recommendable also in opposite case.

[127] http://www.in-pharmatechnologist.com/news/ng.asp?id=69785-lonza-asia-api-biopharmaceuticals-intermediate
[128] http://www.kerzentest.de/eci/?newsid=59&sprach_id=en
[129] http://www.pulpandpaper.net/NetLetter/Features/06202007.asp
[130] http://pubs.acs.org/cen/coverstory/8203/8203customchemicals3.html

2) Implement global operations structure for the business activities (see below for the Otis case)
3) Implement measures for the global sourcing of maximum of its inputs (see the above chapter 3.4)
4) Try to establish position on the markets that are most competing. The aim is to establish the presence at the low cost / most competing markets to hedge against the competition. Such approach is commonly applied e.g. for the Asian economies[131]. For the entry on foreign market see chapter 4.7.
5) Identify the highest added value/competitive leverage and develop it. Many companies pursue the strategy of increasing of the innovation in order to leverage against the Asian competition[132]. However, with that the company shall be really sure that the technological investment makes sense as nowadays the low cost regions are also very good at adopting of the best available technologies.
6) Hedge against the risks with currency exchange and rising prices of the inputs (see the above chapter 5).

5.3.2 Analysis of the exposure / vulnerability of its activities to global competition

The below matrix is used by one of the leading consultancy[133]and gives numerical feedback on the exposure of company to global competition. In addition to it, and in general, the company shall always be concerned if it produces the products that are easy to transport/import that and do not posses very special technological patent (nowadays the global competition is not distinguishing between the high and low value of product). So for example if the product has very short lead times and high quantity and diversity requirement, the global competition is of less relevance.

Positioning a business on the Global Integration/Local Responsiveness Grid

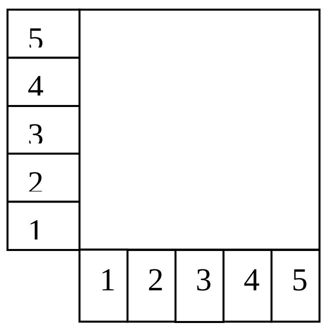
		1	2	3	4	5	
Global Factors							

[131] http://www.manufacturing.net/article.aspx?id=3972
[132] http://www.manufacturing.net/article.aspx?id=3972
[133] Global Strategic Management, Philippe Lasserre, (INSEAD), Palgrave Macmilan, 2003.

A To what extent customers have similar demands for functionalities and design across countries.	**Very different**						**Very simillar**
B To what extent products or services have high proportion of standard components across countries.	**Low proportion of standard components**						**High proportion of standard components**
C To what extent customers (or distributors) are themselves operating in different countries and are buying centrally your products or services.	**Buying locally**						**Buying centrally**
D To what extent significant economies of scale in your industry are important for the cost of the product (i.e. one needs very high volume to obtain low cost).	**Low economies of scale**						**High economies of scale**
E To what extent the speed of introducing new products worldwide is important for competitiveness.	**Speed is not that important**						**Speed is very important**
F To what extent the sales of your product or service are based on technical factors or alternatively on cultural factors	**Highly cultural**						**Highly technical**
G To what extent experience gained in other countries by a "sister" subsidiary can be successful if applied in other countries	**No great benefits**						**Yes, highly beneficial**
H To what extent competitors in your industry operate in a "standardized" way across countries and are successful in doing so	**Competitors are localizing**						**Competitors are successful in standardized approaches**
I To what extent customers "behave" the same way across countries	**Customer behavior is very different**						**Customers behave in the same way**
J To what extent innovative activities (R&D, design) require concentration of expertise in order to be effective (critical mass)	**Low critical mass**						**High critical mass**
GLOBAL INTEGARTION SCORE Sum of A to J/ 10 = …….							
K To what extent pricing can be different from country to country without introducing dysfunctionalities	**Pricing has to be coherent across borders**						**Pricing can be very different**
L To what extent distribution channel management differs from country to country	**Not so different**						**Yes, very different**
M To what extent business regulations and contexts differ from country to country requiring a high degree of local practices	**Not too different**						**Highly different**
N To what extent products or services require a high degree of interaction with customers (customization)	**Low customization**						**High customization**
O To what extent transportation cost or customer interface are such that local	**Not so**						**Local**

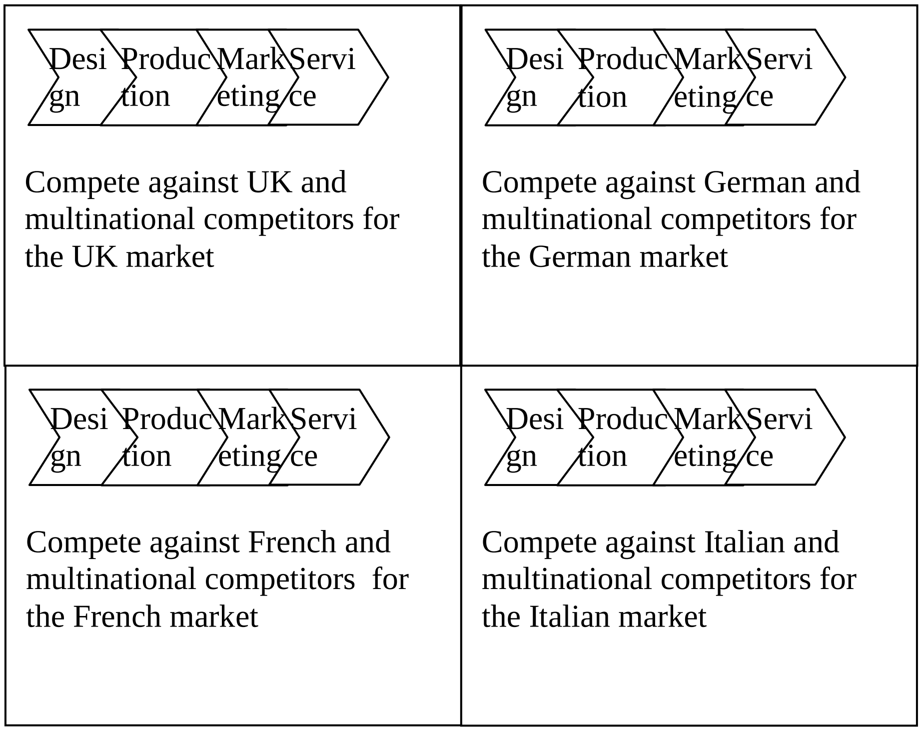
operations are needed	**different**						**operations are essential**
LOCAL RESPONSIVNESS SCORE Sum of K to O / 5 = ………..							

One obtains scores between 1 and 5 and one can position the business on the Grid below (1 is the lowest and 5 is the highest global integration or local responsiveness required. High global integration + low local responsiveness = high exposure to globalization).



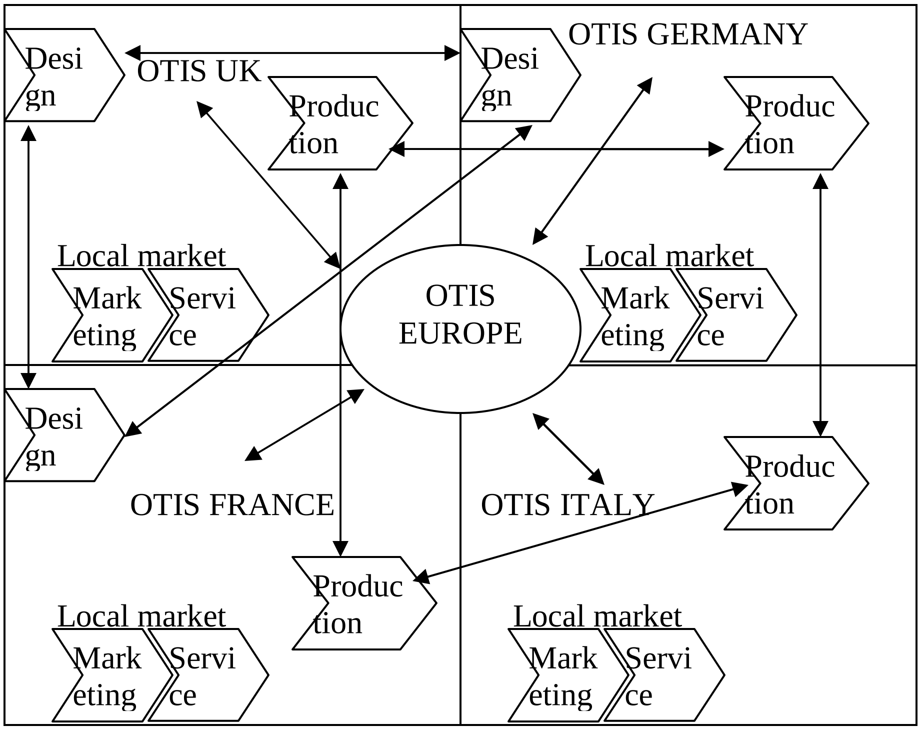
5.3.3 Implement global operations structure for the business activities – Otis case

In seventies the management of Otis successfully transitioned from the multinational to a global company. Despite the differences in housing organization across countries, elevators were essentially technical products with very little cultural content and therefore able to be standardized. Only selling methods would vary from country to country. The Otis manager perceived this as an opportunity to gain market share in Europe and engaged in the pan-European strategy in which design centers and factories were specialized and independent (see below for the charts). By 1975 Otis had captured 40% of the European market. This concept was further expanded and today Otis is organized by product lines on a worldwide basis. There are still country subsidiaries but otherwise product development and manufacturing is co-ordinated globally by product lines.[134] On the below charts the previous set up of the Otis activities is described. The first chart shows the original structure (all activities concentrated per country). The second chart shows the new global organizational structure (production and design integrated).



A Multinational competitive configuration: previous setup

[134] Global Strategic Management, Philippe Lasserre, (INSEAD), Palgrave Macmilan, 2003.



A global competitive configuration: new set up

6. Overall conclusion

Despite the fact that the thesis is called Management in the global economy: opportunities and risks. I intentionally tried to refrain from general descriptions of globalization processes. Instead, the thesis is focusing on detailed description of management topics in the three major pillars: Global buying of company inputs, Expansion on the foreign markets (Output side), Capital markets and the hedge against the global risks. In my opinion the so called globalization is nothing else than willingness of management to extend the company’s activities on more international level and to recognize the potential risks the open markets can have on the domestic business activities. I tried to include successful examples of those who actively participate in globalization and negative examples of those who fail to recognize the strength of the open market in their field and are faced with negative consequences.

In my opinion, the company shall always optimize with the international/global perspective in order to thrive. Ideally, the operations such as purchasing of inputs or design shall be centralized. The localization of these activities shall be purely economic (lowest total cost) and based on the availability of necessary resources and business environment. The foreign market expansion shall either strengthen the output side (e.g. export only) or overall jump the higher scale for the input and output operations (e.g. full acquisition of assets). Once the company is active in the markets it shall not see it as permanent status. It is important to always evaluate the attractiveness of the market and be ready to retreat, reduce or even liquidate the position in exchange for the expansion on more perspective markets. These considerations shall never be influenced by the fact that the company has traditionally been present on the market as this makes rather emotional than economic sense. The aim shall be the global maximization of the profit. The spend shall be aggregated with constant desire to achieve global bottom line. The saved money is ideally to be used for expansion on the new markets such as acquisition of competitors in the perspective markets and desired segments. Of course, the savings can also be applied in R&D or partly distributed to the share holders.

All the current big names have grown from local enterprises. I showed the example of Ikea but less known names such as Emerson are great example of successful growth. This company went from local producer of electric motors and fans (in 1899) to global player in the areas of process management, climate technologies, network power, storage solutions, professional tools, appliance solutions, motor technologies, and industrial automation. Their growth path is great example of rigorous application of sophisticated strategy relying on excellence in global buying, targeted acquisitions in perspective markets, strong know how building and quality deployment[135]. To become globally successful company, the boarders or historical development are becoming less relevant. So even though we associate the big names mostly with the USA or Western Europe. The trend growth of Asian, Indian, Eastern European companies is remarkable. The names such as Sinopec, Gazprom, UEZ of Russia, TATA, Mittal, China First Automotive Works are among world's biggest of the big - Global Fortune 500 and many not so

[135] http://www.emerson-ap.com/eng/about/ae_history.html

extremely large companies are expanding globally too. As the globalization is the continuous process every company has its own possibility, no excuses allowed, in profiting from the global markets. In many fields the global/international presence has become the necessity in order to survive as the tactics of e.g. aggressive price cuts (market share building) financed by the margins (profits) from other markets has become standard (this happened e.g. by the Food chains in Czech republic). Even though the arguments are powerful the resistance against the international/global moves is widespread among the managers both at the top or middle level. In my previous Msc. thesis on the EU market in services at the Charles University I distributed the questionnaire between the Czech construction companies with 10 or more employees asking among others about the barriers in expanding on the EU markets. Thirty percent of them answered that it is the language and cultural barrier and thirty one percent indicated the missing knowledge of business environments in other countries. This points to the seemingly basic element which is the communication in the foreign language(s) and ability to learn more about the foreign business environment. However, there is nothing to underestimate on that. Many people in business are still sticking to the national way of doing business just because they are not willing to deal with different cultures and languages or due to general laziness to accept more complex transactions. I have personally seen examples of “overlooking” or “distant” behavior towards to “Asian” or “Eastern European”. The prejudice against the “Russians” is also rooted deeply in some minds. With such attitude the supply chain will never become global competitive partnership instead it will be rather network of good friends that are striking friendly deals. The potential markets will not be penetrated and exploited. Of course, the extension of the supply or sale chain can bear certain risks. It can also put additional workload on the management level. However, the pay off can be significant. I dare to say crucial for the future of the company. Many executive of such “bellwethers” are than swallowing the bitter pills when they are taken over by companies coming from regions on which they were turning their noses. The few examples such as Jaguar (Indian TATA), Skoda Plzen (Russian OMZ Group), Vitkovice steel (Russian Evraz steel), Arcelor steel (Indian Mital steel) speak for themselves.

Another important think is that the size of the company doesn't really matter. As stated above, even the current big players have grown from small firms. Every company is buying inputs and selling outputs. One or the other can be positively impacted by the globalization / internationalization. This is especially true for European countries with the high proximity of the borders. However, when considering any kind of more strategic decision on input or output, every company regardless of size shall always consider the global maximization of profit. The cost of communications (voice on IP, internet, transportation) has decreased significantly thus enabling to make more operations on global scale. Therefore, the open mind is needed. Nonetheless, every decision has to be economical which not always equals the more international the better.

The same regarding the size applies for the hedge against the global risks. Every company or even household can hedge against the growing cost of petrol or food/agricultural products which are pushed up by the global/international demand and irresponsible and flawed monetary policy (a fact nobody questions today). Every company can manage the currency risk. The access to global trading platforms has made it so easy that I can't call it anything else than shame that A) many business entities remain unheged (again not only the small guys but also giants such as Sonny can tell their stories) but also B) that many business use the overprized services of banks or other financial mediators that are selling the deals which can be easily managed by the company management. The knowledge of these specialists is often very poor. I dare to say even close to gambling with moral hazard. Little bit of curiosity and commitment of smart management team can save company a lot of unnecessarily paid money on provisions.

To final conclude in my above thesis I made the attempt to try to practically approach the global aspects including the advices. The assessment to which measure I succeeded remains within each reader.

Sources

Books:

Building Supply Chain Excellence in emerging economies, Hau L. Lee, Chung-Yee Lee, Springer, 2007

Logistic and Supply Chain Management, Creating Value-Adding network, Martin Christopher, 3rd edition, FT Prentice Hall, 2005

Supply Chain Management, Strategy, Planning, and Operation, Sunil Chopra and Peter Meindl, Parentice Hall, 2001
The Quest for Global Dominance, Govindarajan Gupta, Jossey-Bass A Wiley Company, 2001

Global Cases in Logistics and Supply Chain Management, David H.Taylor, Thomson Learning, 1997

Internationales Marketing und Exportmanagment, Gerald Album, Jesper Strandskov, Edwin Duerr, Pearson Studium, 2001

Global Marketing Management, Masaki Kotabe, Kristian Helsen, John Wiley & Sons, Inc., 2000

Financial Crisis, Contagion, and Containment: From Asia to Argentina, Padma Desai, Princetown university press, 2003

International Marketing Strategy: Environmental Assessment and Entry Strategies, Michael R. Czinkota, Ilkka A. Ronkainen, The Dryden Press Harcourt Brace College Publishers, 1994

International Marketing Research, C. Samuel Craig and Susan P. Douglas, John Wiley & Sons, Inc., 2000 [1]

International Management, Beamish, Morrison, Inkpen, Rosenzweig, MacGraw-Hill Education, 2003

Managing Global Financial and Foreign Exchange Risk, Ghassem A. Homaifar, John Wiley & Sons, 2004

Exchange-rate determination, Anne O. Krueger, Cambridge University Press, 1983

Macroeconomic II, Milos Mach, Melandrium, 2001

Global Strategic Management, Philippe Lasserre, (INSEAD), Palgrave Macmilan, 2003.

Scale and Scope: The Dynamics of Industrial Capitalism, Alfred Dupont Chandler, Harvard University Press, 1990

Sourcing in China: strategies, methods and experiences. Nassimbeni, Guido, Sartor, Marco. Basingstoke : Palgrave Macmillan, 2006.

Global sourcing logistics: how to manage risk and gain competitive advantage in a worldwide marketplace. Cook, Thomas A. New York : AMACOM, 2007

Global sourcing by MNE’s: impact on domestic firms. Coucke, Kristien. Leuven: KUL. Departement toegepaste economische wetenschappen, 2005.

Strategic supply chain alignment: best practice in supply chain management. Fuchs, Peter, Gattorna, John. Aldershot:Gower, 2002.

Macroeconomics. Abel, Andrew B., Bernanke, Ben S., Croushore, Dean. Boston: Pearson Education, 2008.

International Financial management, Madura, Jeff, Fox, Roland, London: Thompson, 2007.

Financial globalization and the opening of the Japanese economy. Malcolm, James D., London : Curzon, 2001

Globalization, competition and growth in China. Chen, Jian, Yao, Shujie, Abingdon: Routledge, 2006.

Macroeconomic fluctuations and firm entry: theory and evidence. Lewis, Vivien. Brussels : National Bank of Belgium, 2006.

<u>Papers, articles, analytical documents:</u>

Governance and Economic Globalization: Continuities and Discontinuities, Aseem Parkash, Prepared for Presentation to the United Nations General Assembly, New York, September 30, 1999
http://faculty.washington.edu/aseem/ga.pdf

Managing globalization and the role of the OECD, Korean University Business School, 20 September 2006
http://www.oecd.org/document/30/0,3343,es_2649_201185_37478942_1_1_1_1,00.html

Economic Globalization and Inflation: The Case of the EMEAP Economies
Bank of Japan
http://www.boj.or.jp/en/type/release/zuiji07/un0708a.pdf

Low-Cost Country Sourcing Success Strategies, Maximizing and Sustaining the Next Big Supply Savings Opportunity, AberdeenGroup, 2005

Power and interdependence in Kraljic’s purchasing portfolio matrix, Marjolein C.J. Caniëls and C.J. Gelderman, Competitive paper presented at the IPSERA 2005 Conference
http://www.ou.nl/Docs/Faculteiten/MW/Congres%20Papers/2005/20-23%20maart%202005.pdf

Asia’s Financial Crisis and its Likely Impact on Australia, Peter L. Swan, National Australia Bank
http://www.sirca.org.au/Papers/1998026.pdf

This is not merely a subprime crisis, Wolfgang Muenchau, Financial Times, 14 January 2008

Japan's Deflation and Policy Response, Bank of Japan,
http://www.boj.or.jp/en/type/press/koen/ko0304d.htm

Singapore’s manufacturing sector 1995 – 2005, Nah Seok Ling, Economic planning board
http://unpan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN024567.pdf

Commodities review 2007, ETF ltd.
http://www.commodities-now.com/content/research/includes/assets/ETFReview2007.pdf

Fitch Ratings: Base Metals outlook 2008.
http://www.commodities-now.com/content/research/includes/assets/Fitch08BaseMetalsOutlook171207.pdf

Managing Commodity Price Uncertainty, Charles Tooman, Gary Germeroth,
http://www.commodities-now.com/content/market-areas/general/ma-article-10.pdf

In China’s Shadow: The crisis of American Entrepreneurship, Yale university
http://yalepress.yale.edu/yupbooks/hundt.ppt#847,17

Key World Energy Statistics 2006, International Energy Agency,
http://www.iea.org/Textbase/nppdf/free/2006/Key2006.pdf

Argentina Devalues, and the Spanish Feel the Loss, New York Times, January 8, 2002,
http://query.nytimes.com/gst/fullpage.html?res=9E02EFDB1439F93BA35752C0A9649C8B63

Russian news & Information Agency, Investment in Russian economy to reach $360 bln in 2010
http://en.rian.ru/business/20070928/81575923.html

Household debt hits 171 per cent of income, The Age, September 12, 2006
http://www.theage.com.au/news/business/household-debt-hits-171-per-cent-of-income/2006/09/12/1157826927608.html

U.S., World’s Growing Household Debt, The New Face of Economic Downturns and Upturns?
http://www.marubeni.com/dbps_data/_material_/maruco_en/data/research/pdf/0407.pdf

Japan's Deflation and Policy Response, Bank of Japan
http://www.boj.or.jp/en/type/press/koen/ko0304d.htm

CRS Report for Congress, **The Financial Crisis in Argentina**, J. F. Hornbeck, June 5, 2003, http://assets.opencrs.com/rpts/RS21072_20030605.pdf

Twin crisis in the Czech Republic: Causes, Consequences and Lessons, Miroslav Singer, 23 November, 2006, Czech National Bank,
http://www.cnb.cz/m2export/sites/www.cnb.cz/en/public/media_service/conferences/speeches/download/Singer_20061123.pdf

The Great Crash and the Great Slump, J. Bradford DeLong, Professor Economic department University of Berkley, 1997
http://econ161.berkeley.edu/TCEH/Slouch_Crash14.html

Zombie Lending in Japan, How Bankrupt Firms Stifle Economic Reform, Anil K Kashyap, Professor University of Chicago Graduate School of Business.
http://www.chicagogsb.edu/capideas/sep06/3.aspx

Out of the shadows: How banking’s secret system broke down, Financial Times, December 16 2007, Gillian Tett and Paul J Davies
http://www.ft.com/cms/s/0/42827c50-abfd-11dc-82f0-0000779fd2ac,dwp_uuid=d355f29c-d238-11db-a7c0-000b5df10621.html?nclick_check=1

The Financial Tsunami Part IV: Asset Securitization - The Last Tango
by F. William Engdahl, February 8, 2008
http://www.financialsense.com/editorials/engdahl/2008/0208.html

Worse than LTCM: Not Just a Liquidity Crisis; Rather a Credit Crisis and Crunch, Nouriel Roubini, August 9, 2007, http://www.econ-pol.unisi.it/tonveronachi/Roubini_Worse%20than%20LTCM_9_9_07.pdf

Housing, consumption, and the economy: Why do house prices become misaligned,

and what are the consequences? University of Oxford, Department of Economics, 2 June 2005,
http://www.economics.ox.ac.uk/members/andrew.farlow/Farlow3June2005.ppt#302,8

Pojetí hrubých domácích resp. národních úspor, Cesky Statisticky urad, 2002
http://www.czso.cz/csu/2002edicniplan.nsf/p/1510-02

U.S. savings rate hits lowest level since 1933,
http://www.msnbc.msn.com/id/11098797/

China’s Economy, The US-China Business Council, April 2006,
http://www.uschina.org/info/chops/2006/economy.html

Savings or Spending: Matter of Growth, Parliamentary Research of Canadian Parliament, Philippe le Goff, 2 Febreuary 2004,
http://dsp-psd.pwgsc.gc.ca/Collection-R/LoPBdP/EB-e/prb0349-e.pdf

Tendence a faktory makroekonomického vývoje v roce 2006 (v kontextu s dlouhodobými trendy), Ing. Slavoj Czesaný, DrSc, Cesky Statisticky urad, 2007
http://www.czso.cz/csu/2007edicniplan.nsf/p/1101-07

Manufacturing in America, A comprehensive Strategy to Address the Challenges to U.S. Manufacturers, U.S. Department of Commerce, January 2004,
http://www.ita.doc.gov/media/Publications/pdf/manuam0104final.pdf

Does Australia’s manufacturing decline hold a lesson for the US economy? Gerard Jackson, 17 September 2007, http://www.brookesnews.com/071709manufacturing.html

Is the United States Bankrupt?, Laurence J. Kotlikoff, Federal Reserve Bank of St. Louis, 2006,
http://research.stlouisfed.org/publications/review/06/07/Kotlikoff.pdf

Trends and recent developments in foreign direct investment, International Investment Perspectives: Freedom of Invesment in a Changing World, OECD, 2007
http://www.oecd.org/dataoecd/62/43/38818788.pdf

Index of production, November 2005, UK National Statistical office
http://www.statistics.gov.uk/pdfdir/iop0106.pdf

Too Much of a Good Thing? Credit Booms in Bulgaria, Romania, and Ukraine, Christoph Duenwald, Nikolay Gueorguiev, and Andrea Schaechter, 2005
http://worldbank.org/html/prddr/trans/July_September_2005/Too%20Much%20of%20a%20Good%20Thing.doc

Commodity bull run has a long way to go, Financial Times, Ian Henderson, February 20 2008 http://www.ft.com/cms/s/0/483d9e50-dfcd-11dc-8073-0000779fd2ac.html?nclick_check=1

Booming China Devouring Raw Materials, Peter S. Goodman, Washington Post Foreign Service, May 21, 2004
http://www.washingtonpost.com/wp-dyn/articles/A43765-2004May20.html

Wheat Rises as Dry Weather in U.S. Great Plains May Reduce Crop, Jeff Wilson, February 22, 2008
http://www.bloomberg.com/apps/news?pid=20601012&sid=aBMHe0RYX57s&refer=commodities

Soybeans Rise to Near Record on Demand From China; Wheat Gains, Jae Hur, February 22, 2008
http://www.bloomberg.com/apps/news?pid=20601012&sid=aIjNji7juC5Q&refer=commodities

The Realities of this Secular Bull Market in Commodities, Lawrence Roulston, January 21, 2008
http://www.kitco.com/ind/Resopp/roulston_jan122008.html

World energy demand to 2030, Exxon Mobile
http://www.exxonmobil.com/Corporate/energy_outlook_world.aspx

Manažeři o rostoucích cenách plynu a elektřiny v průmyslu ČR
http://www.glassrevue.com/news.asp?nid=4395

Lonza losing out to Asian competition, Kristy Barnes, 10 Aug 2006
http://www.in-pharmatechnologist.com/news/ng.asp?id=69785-lonza-asia-api-biopharmaceuticals-intermediate

The European candle industry defends itself against dumped imports from China
http://www.kerzentest.de/eci/?newsid=59&sprach_id=en

Globalization of the Paper Industry: Over-Investment in China
http://www.pulpandpaper.net/NetLetter/Features/06202007.asp

Asian Competition Gathers Strength, A. Maureen Rouhi, January 19, 2004
http://pubs.acs.org/cen/coverstory/8203/8203customchemicals3.html

Definition of multinational corporations, Iowa State university, Economic department:
http://www.econ.iastate.edu/classes/econ355/choi/mul.htm

Other sources of data/information

Institute for Supply Management
http://www.ism.ws/

Household Debt Service and Financial Obligations Ratios, Federal Reserve Board
http://www.federalreserve.gov/releases/housedebt/

Economics, Business, and the Environment — National Savings: Gross savings, percent of GNI Units: Percent (%),
http://earthtrends.wri.org/text/economics-business/variable-588.html

Alternative source of macroeconomic statistic compared to the official published numbers
http://www.shadowstats.com/

The koruna´s forward exchange rates against the euro and US dollar announced by the CNB,
http://www.cnb.cz/en/faq/faq_o5.html

Forward trading instructions
http://easy-forex.com/au/GuidedTour/forwards.aspxµ

Euro Spot Forward rates Financial Times
http://markets.ft.com/ft/markets/researchArchive.asp?report=ESP

Valuable macroeconomic data used for analysis
http://www.dbresearch.de/servlet/reweb2.ReWEB?rwkey=u8992207

Foreign exchange rates used in analysis
http://www.kurzy.cz/kurzy-men/

Data for research UK National Statistics office
http://www.statistics.gov.uk/STATBASE/tsdataset.asp?vlnk=221&More=Y