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PAPER

Reforming International Trade Order: Shaping Positive Environment for China's Trade Disputes Settlement

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Abstract After the financial crisis, China has been facing severe international trade disputes and a complicated international trade environment. China needs to distinguish and apply various bilateral, regional, and multilateral trade dispute settlement paths. Facing the increasing number of international trade disputes and a more and more complex trade environment, China should distinguish, utilize and evaluate various bilateral, regional and multilateral routes of trade dispute settlement. With developing economic and commercial power, China has internal impetus to involve in shaping international trade order in a new round of multilateral trade negotiations. This paper analyzes the interactive relationship between the adjustment of international trade order and China's trade dispute settlement through the following three aspects: constructing international trade power structure, building up trade regulation system, and settling international trade administration.

Keywords: international trade order; trade dispute settlement; Chinese economic diplomacy, US-China trade dispute.

JEL classification: F02; F10

Introduction

The growth of economic strength and trade scale has made China a backbone in the international trade system. At the same time, it has also made China a target of international trade frictions. Trade dispute[1] has become an important factor restricting China's foreign economic and diplomatic strategies. The data released at the 2016 National Conference on Business Work points out that the investigations on trade remedy launched by WTO member states in 2016 reached the culmination since 2009, one-third of which was targeted at China; by the end of 2016, 27 countries

[1] Trade disputes, trade friction, and trade conflict are different manifestations of trade conflicts. In general, trade frictions are more prominent than trade disputes. This article does not strictly distinguish the use of trade disputes and trade frictions.

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around the world had launched investigations on China. There were 117 trade remedy investigations with the number of cases and the amount involved increased by 34.5% and 71.5% year-on-year. China has been the country bearing the most anti-dumping investigations for 21 years and the most anti-subsidy investigations for 10 years.[2]

Throughout China's trade dispute cases, the two sides of the disputes exhibited a gradual shift from China-Europe, China-India, China-Japan to China-United States. At the beginning of 2017, the United States made a number of trade remedy rulings against China, and imposed a high level of anti-subsidy and anti-dumping duty rate on China's double reflexes on China's amorphous fabrics, general carbon and alloy steel plates, ammonium sulfate and wheels, and stainless steel strips.[3]

On August 18th, the United States officially launched the "301 investigation" on China based on the "Trade Act 1974" and investigated on that "China infringes upon US intellectual property and forced the transfer of technology from US companies"; in August 2017, the United States appealed to WTO to set up a special group to investigate the use of tariff quotas (TRQ) for agricultural products in China.[4] US announced its trade sanction towards China's steel products and telecommunications giant ZTE in 2018. At this point, the trade war between China and the United States has entered an intense period.

The current trade frictions faced by China have already formed a new normal status characterized as high frequencies and large countries confrontation. With the increasingly complex international trade environment and the endogenous drive of China's gradual growth into a powerful trading nation, China's trade dispute settlement program must surpass the simple "one time one thing" response and should pay more attention to the reform of international trade system and the adjustment of international trade order . This article focuses on the interactive relationship between the adjustment of the international trade order and the settlement of China's trade disputes. Can we shape a more rational and fair international trade order from the perspective of dispute settlement mechanism selection and construction? China actively participates in the process of reforming global trade order. Can we establish an international trade environment which promotes the settlement of China's trade disputes?

In order to respond to the new round of global trade protection and the "U.S. priorities" and "trade nationalism" of the Trump Administration, China should adhere to the principles of fair trade, adhere to WTO trade rules, leadthe construction and improvement of international trade rules, and safeguard the normal operation of the international economic order.

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[2] Chen Yu (2016) Ministry of Commerce: China faces frequent trade frictions. CRI Online http://news.cri.cn/20161227/a774489d-55d5-b4c4-5b28-f76c1882a3e9.html

[3] Yu Jiaxin (2017) How do you see the frequent Sino-US Trade Frictions during the New Year? Xinhua Net http://www.xinhuanet.com/world/2017-02/09/c_1120440778.htm

[4] Wang Ximeng (2017) U.S. Application for WTO Investigation of China's Import of Agricultural Products. Cankaoxiaoxi.com http://www.cankaoxiaoxi.com/world/20170823/2223679.shtml

International Trade Order and China's Trade Dispute Settlement

1. China's International Trade Environment

The international trade environment is mainly composed of external trade policies faced by a country. International trade rules are dominated by managed free trade. WTO has become the authoritative "agent" of international trade management. Various WTO dispute settlement mechanisms play a regulatory role in restricting trade barriers among large countries and maintain a rule-based international trade order. Since joining WTO, China has grown into the world's largest exporter, the second largest importer, the third largest importer of service, and the fourth largest exporter of service. After the financial crisis, trade protectionism has risen and global trade frictions have intensified. China has become the largest target country for global trade remedy measures. The external pressure of increasing foreign trade disputes and the internal tensions in the domestic economic transition have form an objective trade environment that China cannot avoid. Here are several characteristics of China's foreign trade disputes: dispute are mainly with developed countries such as the United States, Japan, and the European Union and also with developing and emerging countries in recent years; disputes are based on non-tariff barrier measures such as anti-dumping, countervailing subsidies, and technical trade barriers; the dispute fields include goods trade, service trade, trade-related intellectual property, etc.; disputes mainly target at labor-intensive products of traditional manufacturing industries in China and also involve some emerging industries; RMB exchange rate, new energy policy, investment environment, market access and government procurement have become new hot spots in trade disputes.

2. China's Existing Dispute Settlement Mechanisms

The existing mechanisms for the settlement of international trade disputes mainly include three types: first, bilateral negotiations and consultations; second, regional trade dispute settlement mechanisms; third, WTO multilateral dispute settlement mechanisms.[5] To choose among various mechanisms and increase their effectiveness is the primary step to resolve trade frictions and the main challenge for China to participate in the reconstruction of the international trade order.[6]

2.1. Bilateral consultation

The bilateral consultation mechanism is the theory and mechanism for the settlement of international issues in a political or legal manner on the basis of negotiation between the two subjects of international law. [7]The bilateral approach is an important way for China to solve problems and improve the international trade environment. In the first few

[5] Taking unilateral retaliatory measures will easily lead to an escalation of the trade war, which is beyond the scope of this article.

[6] Li Chunding, Zhao Yingmei (2011) Choice and Effectiveness of International Trade dispute settlement Mechanism: Theory and China's Choice, Finance and Trade Economy

[7] Bilateralism limits the number of participants, and refers only to the way between two countries, two international organizations and one country and one international organization. Refer to Wu Yonghui (2010) An Analysis of the Bilateralism in the WTO System, Modern Law

years after China's accession to the WTO, we reached an agreement through bilateral consultations to resolve trade disputes, including China-South Korea trade negotiations, China-Japan bilateral agricultural product disputes consultation, China-EU consultation on textile issues, and China-US textile negotiations. Although trade disputes between China and developed countries have gradually shifted to multilateral mechanisms, bilateral consultations are still an important means for the settlement of trade disputes between China and developing countries, including India, Turkey, and Argentina that have implemented trade remedy measures to China.[8]

However, it is difficult for bilateral consultations to effectively prevent trade remedy measures such as anti-dumping that relies on the laws of the complaining country. In response to the EU's anti-dumping investigation on China's footwear products, China negotiated with the EU in a diplomatic manner in 2007 to discriminate against Chinese products in violation of WTO principles, but it did not prevent the EU from passing anti-dumping resolutions and imposing high anti-dumping duties on Chinese products. Ultimately, this case was won by China in 2012 through the WTO dispute settlement mechanism. It can be seen that the bilateral dispute settlement is closely related to both the strength of the two sides and the ability to retaliate. Developing countries must strengthen their economic power and strive more for initiatives in bilateral trade negotiations.

2.2. Regional dispute settlement mechanism

At present, most WTO members have joined various regional trade arrangements. The role of regional trade arrangements and regional economic integration organizations in the settlement of disputes has continued to increase with increasing related research.[9] Existing regional dispute settlement mechanisms are mainly: the EU's judicial enforcement mechanism, the Association of Southeast Asian Nations (ASEAN) quasi-judicial mechanism[10], the EU-China free trade agreement and other loose mechanisms11. China's participation in regional dispute settlement mechanisms is mainly quasi-judicial and loose.

Regional trade agreements have legal status under the framework of the WTO and have the right to establish dispute settlement mechanisms on their own, resulting overlap of jurisdictions. The dispute counterparties therefore can give choose the adjudication mechanism for the dispute. China has established various free trade zones, especially the China-ASEAN Free Trade Area which offers options for the settlement of trade disputes between members with relatively single interests. Orderly

[8] Wang Xiaowen (2009) Research on China's International Trade Environment and Effects under the Multilateral Trade System, Nankai University Doctoral Dissertation

[9] The dispute settlement mechanism of the North American Free Trade Area is not strong, but it is more flexible. There are differences in the degree of legalization of different regional dispute settlement mechanisms and it is proportional to the balance of power among members in each region.

[10] This mechanism does not have regional courts at the super-national level, but there are expert groups and appellate bodies that deal with disputes. The main means of settlement are mediation and arbitration.

[11] Such mechanisms do not have any specific provisions on dispute settlement, nor do they have permanent expert groups and working bodies to resolve disputes through diplomatic means such as consultations, and mediation.

regional economic integration can serve as a useful complement to the multilateral trading system. Over-development and unregulated regionalization may also weaken the authority and role of the multilateral trading system, making competition among nations evolve toward regional group competition.[12]

2.3. WTO multilateral dispute settlement mechanism

The dispute settlement mechanism (DSM), which is mandatory and binding, has become one of the main functions of the WTO and the biggest mark that distinguishes WTO from other international economic organizations. The WTO Dispute Settlement Mechanism has established a permanent part to balance the use of judicial jurisdiction and diplomatic consultations, including consultation and mediation, the work of the expert panel, the work of the Appellate Body, the adjudication of dispute settlement bodies, and the implementation of the report.

The mechanism has achieved remarkable results since its establishment. However, there are also many deficiencies in the actual operation of the DSM, such as inefficiency, lack of implementation capabilities, power-oriented institutional arrangements favoring trade powers, and the lack of flexibility required for crisis management. Therefore, the WTO dispute settlement mechanism also needs continuous reform.[13]

2.4. Evaluation of various dispute settlement mechanisms

A large number of documents have analyzed domestically and abroad about the choice of trade dispute settlement mechanism. On the one hand, bilateral consultations on dispute settlement, regional arrangements, and multilateral mechanisms are linked. Any settlement of trade frictions must first be conducted through bilateral consultations. The multilateral dispute settlement mechanism also has obvious bilateralism. On the other hand, there are obvious differences among the three mechanisms. Bilateral negotiations are aimed at negotiating and solving the root causes of friction. They are highly efficient and low-cost. However, bilateral negotiations lack a basis for cooperation and common interests so it is barely feasible to weak countries. The regional mechanism combines the comparative advantages of efficiency in bilateral negotiations with the binding force of the multilateral system; however, regional organizations are difficult to set up and dispute settlement systems are poor. Multilateral mechanisms are authoritative and binding to counterbalance powerful countries and protect weak ones. Disadvantages of it are low efficiency, high costs, and unpredictable results. Therefore, careful research on the choice of trade dispute settlement mechanism is needed.

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[12] Wu Yonghui (2010) An Analysis of the Bilateralism in the WTO System, Modern Law

[13] He Ping (2009) Study on the Japan-US Trade dispute settlement Mechanism under the Multilateral Trade System, Fudan Journal(Social Sciences Edition)

China's efforts to shape international trade order of dispute settlement

1. Constructing International Trade Power Structure

The global financial crisis has provided an opportunity for the establishment of a more fair and more rational trade system. It requires relevant agencies and stakeholders to jointly formulate policies and rules for the coordination of international economic trade.14The relative changes in the trade pattern between countries are manifested in internal adjustments among developed countries and changes in the power among developing countries. Developed and developing countries have begun to formulate international trade rules. The new international trade system should be more fair and more equitable and pay more attention to the needs of developing countries. However, due to major differences in positions and interests between traditional big powers and emerging powers, it will be difficult for the power core to reach effective consensus. First, whether the existing dominant powers and rules of international order can accept the rising power of emerging powers. Second, whether the application of international strategies and the strengths of emerging powers can help them obtain the corresponding abilities to transform the international order.15 With the stagnation of the new round of multilateral negotiations, all parties need time to adapt and adjust. In the multilateral trading system, the status and role of the economy should be proportional to the scale of its trade. Corresponding to the scale of trade, new US-led, EU-led, and China-led trade structures may emerge.

The rise of China has brought about changes in the pattern of trade power, but it is difficult to challenge the entire trade governance system. China gradually abandons the establishment of a new international political and economic order, but instead reshapes the multilateral trading system through a more feasible approach. Shaping the international trade order requires strengthening coordination and cooperation among major countries, developing the grouping of international trade, and paying attention to bilateral or simple multilateral regional trade cooperation and cross-regional trade development. In the short term, China must use its market influence, foreign aid, and foreign investment tools to relieve the trade restrictions it faces, achieve a transition to a market economy, and expand China's economic influence.[16]

2. Creating a Trade Rules System

Formulating a set of more flexible fair trade rules will be an important part of the restructuring of the international trade.[17] In the process of resolving trade frictions, the management of trade through "trade coordination" (pre-coordination or post-event coordination) operates and improves the trade rules system, helping to shape a fair and reasonable international trade order. If the construction of national internal rules is the

[14] Han Liyu (2010) Perfecting the International Trade System after the Global Financial Crisis and China's Countermeasures, Jurist

[15] Zhang Xiaotong, Wang Hongyu, Zhao Ke (2013) On the Application of China's Economic Strength, Northeast Asian Forum

[16] Joel Wuthnow, Xin Li, Lingling Qi, "Diverse Multilateralism: Four Strategies in China's Multilateral Diplomacy", Journal of China Political Science, Vol. 17, 2012:269-290

[17] Huang Jingbo (1992) International Trade Friction and Multilateral Management Trade, Journal of Sun Yat-sen University (Social Science Edition)

fundamental requirement for resolving trade disputes, bilateral rules mainly solve high-efficient solutions to specific trade frictions, and regional rules focus on the interaction criteria between homogeneous countries, then multilateral rules are to harmonize global trade principles and norms.[18]

In the view about the construction of China's internal rules, it is necessary to formulate rational industrial policies and implement market diversification strategies; to vigorously promote market economic reforms; to set up governmental inter-agency coordination mechanisms; promote the active participation of companies in prosecution, responding, or participating as a third party in the trial of dispute settlement cases; to encourage non-governmental organizations to participate in the settlement of trade disputes and to establish a dialogue and consultation mechanism between corresponding civil organizations.

2.1. Establish efficient and coordinated trade negotiation rules at the bilateral level

This include: use diplomatic means such as negotiations and consultations to solve the issues related to politically-oriented trade frictions; develop symmetry and interdependence; carry out targeted all-round economic diplomacy; encourage the links between industrial countries in disputed countries; optimize the negotiation team; promote diplomatic cooperation with regional and multilateral diplomacy.

2.2 Establish "homogeneous" trade rules at the regional level

This include: strengthen the institutionalization of regional organizations; increase the degree of network liberalization of regional trade; examine the impact of major regional economic organizations on international trade and China's foreign trade from the perspective of dispute settlement; and improve the exisiting regional trade agreements and their trade dispute settlement mechanisms. [19]

2.3. Adjust the WTO rules

This include: strengthen the WTO dispute settlement theory and case studies; improve the negotiation methods in the WTO dispute settlement mechanism;; vigorously improve the operational efficiency of the WTO dispute settlement mechanism; change the traditional governance mechanism of the WTO group and encourage emerging countries to assume more responsibilities and obligations.[20]

3. Establish an international trade management system

Trade friction is not only an economic issue. It also involves various factors such as foreign policy decisions, government-run disputes, public opinion, interest groups,

[18] Yu Minyou (2009) A review of China's participation in WTO dispute settlement activities, World Trade Organization Dynamics and Research

[19] Davis, Christina L. "Setting the Negotiation Table: Forum Shopping and the Selection of Institutions for Trade Disputes", 2005.http://www.princeton.edu/~cldavis/files/institutional_selection.pdf.

[20] Song Hong(2011) The Rise of China and the Adjustment of the International Order: A Case Study of China's Participation in the Multilateral Trade System, World Economy and Politics

and the mass media. The dispute settlement mechanism should shift from result-oriented "stress response" to system-oriented "normal management." [21]

The establishment of a multilateral management system that is applicable to the settlement of disputes, needs to be guided by multilateral institutions of the WTO, to be coordinated by regional integration organizations, and to be connected by the competent commercial authorities of various countries. In short, the ideal multilateral trade management system is guided by problem-solving values and based on order and the principle of efficiency, with the aim of fairness and the rule of law as the criterion, through universally valuable laws, precedents, and diplomatic negotiations. This organizational system will ensure the shaping and development of the global trade order.

Conclusion and Suggestion

This paper analyzes the existing international trade order and explains the international trade environment which China is facing from the perspective of trade dispute settlement. It points out that shaping a more reasonable and more fair international trade order is the only way to co-ordinate the dispute settlement mechanism and solve the difficulties of China's trade. This article believes that the adjustment of multilateral trade rules and the global trade order is the fundamental solution to China's trade dispute settlement. China has the characteristics of both developed and developing countries, and has the responsibility to play an important role in adjusting the global trade order in the new round of multilateral trade negotiations. In the adjustment of the international trade order, China should use its position in relevant international organizations to play a greater coordinating role, promote the improvement of international trade rules, influence the reconstruction of the international trade order, and establish international trade conducive to the settlement of China's trade disputes.

It is still unrealistic for China to fully participate in the formulation of multilateral trade rules within a short period of time. It is possible to achieve the initial goal of improving the international trade environment by participating in shaping dispute settlement mechanisms and accumulating experience in formulating international trade rules during the course of study.

China should coordinate the bilateral negotiation path for the settlement of trade disputes, the regional cooperation path, and the adjustment path of the multilateral trade order, solve the trade dispute through internal and external structural adjustments, and safeguard the core interests of national economic diplomacy from the strategic perspective of economic diplomacy. China should transform the international pressure brought by external trade disputes into a driving force for domestic policy adjustments, not only to improve the international competitiveness and resilience of domestic products, but also to emphasize the benefits of foreign trade development to the national economy. China should go beyond the existing trade dispute settlement ideas, quickly move from a "passive response" strategy based on self-interest to an international trade

[21] He Ping (2009) Study on the Japan-US Trade dispute settlement Mechanism under the Multilateral Trade System, Fudan Journal(Social Sciences Edition)

order that represents emerging country positions and universal interests, participate in and shape the "strategic transformation" and expand China's foreign trade interests as an emerging power in the balance between the resolution of external trade disputes and the shape of the international trade order.

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PAPER

Credit cycle in Bulgaria

Kamelia Assenova

Abstract The banks play a special role in the financial system. Some economic subjects have less access to other forms of funding than to banks. By the special bank's role for part of the borrowers, credit growth changes the investment and the consumption and stimulates economic growth in the country. During the crisis in 2008 in Bulgaria characterizes with: a gradual decline of the lending rate in 2008 from 24.38% in the first quarter to 2.27% in the fourth quarter for business and lower for household loan to 5.79% at the end of 2009. For the period 2010-2015, households' trends are also descending, but with lower fluctuations - from - 0.81% at the end of 2010 to - 1.79% at the end of June 2015.
Different factors related to the supply and demand of credit influence of their amount. Higher domestic consumption and investment depends on the lending and therefore it could be actively used as an instrument for stimulating of economic growth.

Keywords: Banking; credit; supply and demand of credit.

JEL classification: G20; G21

The banks play a special role in the financial system. Some economic subjects have less access to other forms of funding than to banks. The increase of money supply leads to higher bank reserves and expanding the bank lending. By the special bank's role for part of the borrowers, credit growth changes the investment and the consumption and stimulates economic growth in the country.

The expansion of lending in Bulgaria could be explained in different aspects - as a positive phenomenon at the macroeconomic level, affecting economic growth and negatively at the macro and microeconomic level. On macroeconomic level, it is expressed by: increasing the negative current account balance and creating conditions for the development of inflationary processes. At the micro level, the negative impact due to increasing risk. It effects the stability of the banking system.

1. Data analysis for the period 2003 - 2008

For the period 2003 - 2008 lending constantly increases. The reasons for the credit

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expansion in this period in Bulgaria are directly related to some specific conditions: higher domestic demand due to the economic situation after the introduction of the Currency Board in Bulgaria in July 1997. In general, it is characterized with continued increasing of GDP, sustained macroeconomic stability and low inflation. At the same time, financial stability was achieved and bank confidence in the monetary institution - the Bulgarian National Bank (BNB). Other reasons for post-crisis financial stability are:

- restored confidence in a banking system due to restructuring of most banks. They become private, with foreign owners. Although the banking market is relatively small (with a large number of banks), bank assets dynamically growth;
- government interference in the financial sector is adequate. Overall, the regulation and financial supervision exercised has been positive for the period.

The credit growth for period 2003-2008 depends on additional factors. Together with the macroeconomic stability and the privatization of the banking sector can be mentioned:

- access to international capital markets;
- the decrease of the cost of the resource - as a consequence of the repeated increase of the country's credit rating;
- low interest rates on world markets;
- struggle to increase the market share of Commercial banks;
- higher savings;
- reducing of risk in the real economy due to the improved information environment;
- needs for investment in new technology and equipment due to the strong competition on European market;
- increasing demand for consumer goods - as a result of higher wages and formation of middle class in the country;
- reduced need for public sector loans - if the budget needs to borrow, it would lead to increased interest rates of loans in the country.

Overall economic and financial stability leads to strong increasing of lending. The crisis in the second half of the 1990s led to the suspension of any financial intermediation for some time. The policy followed, has aimed to reducing inflation, high GDP and rapidly growing incomes and profits, exacerbated the need for credit, and changed banks 'views on borrowers' requirements. The foreign banks on the market, as well as the strengthening of Commercial banks audit in the sector, led to a return the confidence of the public to the banks and an increasing of deposits. On the other hand, improved economic conditions predetermined the growth of foreign cash flows, mainly coming from foreign banks in Bulgaria. All factors have led to strong need to find ways for investment of accumulated funds of Commercial banks. Following tendencies have observed:

- continued and very dynamic growth of lending by commercial banks, which in the fourth quarter of 2001 exceeded 32 % (at the end of the period compared to the end of the previous year) and at the end of the fourth quarter of 2004 was 48.58 % and reach in the first quarter of 2005 to 73.09%, restriction of loans in

2006 and 2007, a new peak in the first quarter of 2008 and a rapid decrease in the growth rate in 2009 to 3.59 % at the end of the second quarter;

- Change in the structure of the borrowers in the period 2000 - 2001 due to the change of ownership and the greater efficiency of the private companies;
- Commercial banks investment in foreign assets in 2000-2001 and follows decreasing of them in 2002-2003, related to the increase of lending on the local market;
- Loan expansion, which started in 2003, and reflects the need for long-term capital to upgrade technology and to buy household goods for long-term use. The increased share of long-term loans, could be explained by the increased confidence between creditors and borrowers and the reduction of risk;
- Collapse of foreign liabilities of local banks, which started in 2004 and peaked in 2006, slowing growth in lending;
- Lending in services is highest share compared with all other sectors of economy.

Table 1. Annual growth rate of bank credit for the period 2003 - 2008 quarterly

	I 2003	II 2003	III 2003	IV 2003
Credit for non- government sector, including, %	45.68	52.05	47.05	48.31
- for non- financial institutions, %	42.88	47.90	38.32	37.74
- for households, %	54.30	68.44	73.02	80.65
	I 2004	II 2004	III 2004	IV 2004
Credit for non- government sector, including, %	52.32	47.79	49.27	48.58
- за - for non- financial institutions, %	41.73	35.05	38.64	38.00
- for households, %	84.55	79.60	76.41	74.82
	I 2005	II 2005	III 2005	IV 2005
Credit for non- government sector, including, %	73.09	41.80	35.93	32.39
- for non- financial institutions, %	69.62	32.91	25.93	22.26
- for households, %	81.83	72.18	63.51	58.39

	I 2006	II 2006	III 2006	IV 2006
Credit for non- government sector, including, %	5.59	24.22	23.63	24.61
- for non- financial institutions, %	- 7.49	14.21	17.31	19.42
- for households, %	39.65	38.65	32.58	30.55

	I 2007	II 2007	III 2007	IV 2007
Credit for non- government sector, including, %	36.6	47.8	55.9	62.5
- for non- financial institutions, %-	30.1	47.5	57.8	67.1
- for households, %	37.6	38.6	48.3	52.4

	I 2008	II 2008	III 2008	IV 2008
Credit for non- government sector, including,	59.61	54.63	49.81	38.45
-- for non- financial institutions, %	64.65	58.07	52.89	39.87
- for households, %	51.96	49.18	44.85	36.14

Source: BNB and own calculations

2. Data analysis for the period 2009 - 2015

The conditions of the crisis in 2008 include: a strong decline in the lending rate in 2008 from 38.45. % in the first quarter to 2.27% in the fourth quarter for business and lower household loan contraction to 5.79% at the end of 2009. It is due to two types of bank operations. Concerning liabilities: The lower deposit base and the parent banks withdraw of the non-deposit attracted funds due to liquidity problems in all countries. According assets the reasons are following:

- For businesses - increasing risk in the economy makes banks more cautious considering credit projects. Additionally, increasing of the share of “bad” credits is contributing to it;

- For business - within a bank channel, the period of crisis makes firms less vulnerable to risk. Moreover, the crisis has deteriorated their cash inflows, increased their indebtedness, and the short-term cash flow balancing requires usage of different forms of credit;
- For business, on the other hand, the market conditions and level of aggregate demand is reduced the need for new investments in real assets and the use of loans to finance them;
- For business - the waiting economic results also shrinks demand for credit;
- For households - the rise in unemployment immediately after the 2008 crisis and the keeping of income on the same level led to a decline in demand for credit.

For the 2010-2015 period, lending shows the following trends:

- For businesses - there is a low increase of the loan to 2.42% at the end of 2010, 5.43% - in 2011, approximately the same (4.99%) - in 2012. In 2013 there is a strong contraction of corporate lending, with an increase of 0.07% at the end of the year. It is due to the slow and difficult recovery from the crisis and the still shrunken markets of the Bulgarian exports. The risk is kept at high level, which makes both companies and banks cautious. In 2014, as a result of problems in the banking system and in particular in one of the largest banks in the middle of the year, business lending sharply declined by 11.62% at the end of the year compared to the same moment of the previous year. This trend has preserved in 2015.
- For households - decreasing of the loan for the period 2010-2015, but with lower fluctuations - from minus 0.81% at the end of 2010 to minus 1.79% at the end of June 2015.

Table 2. Annual growth rate of bank credit for the period 2009-2015 quarterly

	I 2009	II 2009	III 2009	IV 2009
Credit for non- government sector, including,	24.53	11.19	5.05	3.59
-- for non- financial institutions, %	24.38	10.09	3.70	2.27
- for households, %	24.79	13.05	7.32	5.79

	I 2010	II 2010	III 2010	IV 2010
Credit for non- government sector, including,	2.34	2.16	1.38	1.19
-- for non- financial institutions, %	1.12	1.24	1.77	2.42
- for households, %	4.36	3.66	0.76	-0.81

	I 2011	II 2011	III 2011	IV 2011
Credit for non- government sector, including,	1.56	2.32	2.49	3.23
-- for non- financial institutions, %	2.98	4.11	4.14	5.43
- for households, %	-0.71	-0.57	-0.22	-0.44

	I 2012	II 2012	III 2012	IV 2012
Credit for non- government sector, including,	3.11	3.76	3.23	2.84
-- for non- financial institutions, %	5.56	6.62	5.98	4.99
- for households, %	-1.00	-1.09	-1.52	-0.97

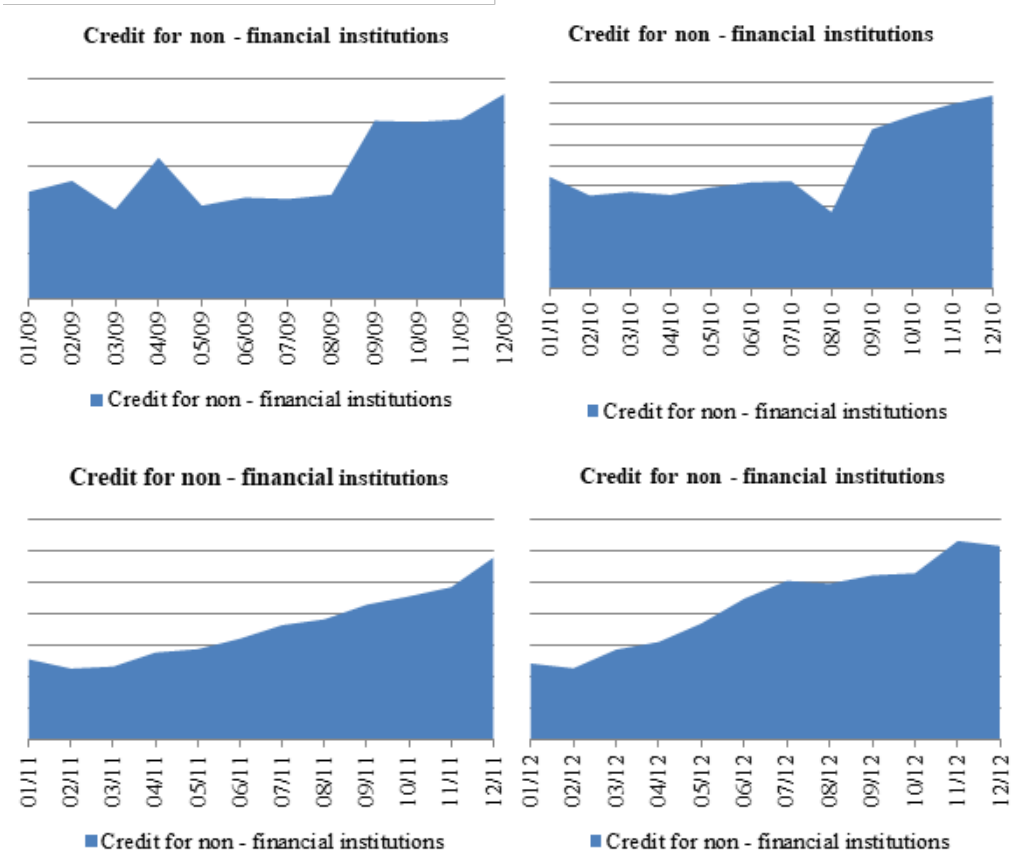
	I 2013	II 2013	III 2013	IV 2013
Credit for non- government sector, including,	2.34	0.99	0.68	-0.01
-- for non- financial institutions, %	4.38	2.04	1.37	0.07
- for households, %	-1.30	-0.91	-0.60	-0.16

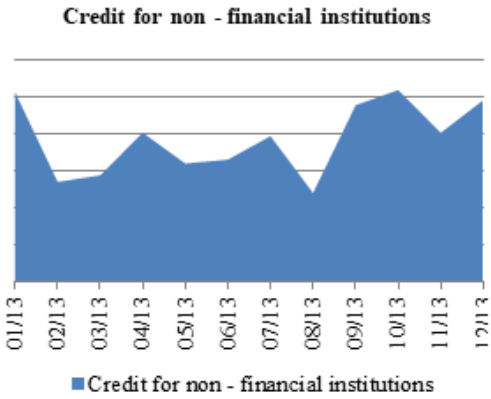
	I 2014	II 2014	III 2014	IV 2014
Credit for non- government sector, including,	1.22	2.10	1.98	- 8.15
-- for non- financial institutions, %	1.70	3.07	2.97	-11.62
- for households, %	0.33	0.28	0.10	-1.64

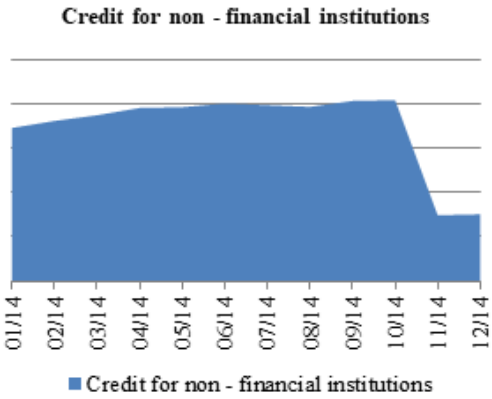
	I 2015	II 2015
Credit for non- government sector, including,	- 9.20	-10.17
-- for non- financial institutions, %	-13.07	-14.51
- for households, %	-1.79	-1.79

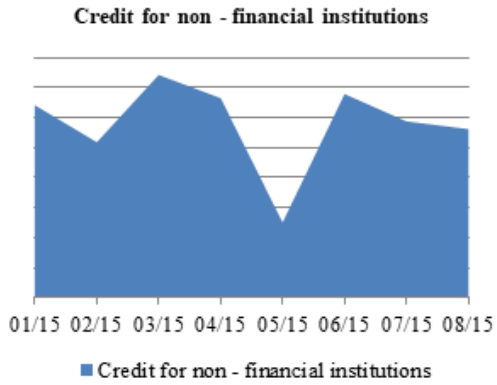
Source: BNB and own calculation

3. Graphical presentation of the data for the period 2009-2015









4. Demand and supply of credit

Positive or negative changes related to the supply and demand of credit determine their amount. The changes in the credit cycle could be divided into several stages over the research period: The first stage is before the country's accession to EU in 2007. At this stage, the following factors have a strong influence on demand:

- expected earnings growth, higher permanent income (according to Friedman's monetary theory) encourages increased consumer lending;
- the rise of real estate prices increases the demand for mortgage loans;
- future participation in the European common market implies new investments in real assets to improve the competitiveness of local economy;
- the higher regulatory European requirements (for example - environmental) requires additional investments to be financed with credit.

The second stage is after accession and before the crisis in 2008. At this stage the demand depends on following factors:

- economic growth. Large numbers of projects with high returns are available, which allows to be financed at a higher price of the borrowed capital;
- rising property prices due to increased demand. The part of it is local, driven by

the level of savings in the country. Another reason is the rate of return by real estate investment. The part of the demand is formed by non-residents attracted to the local market by the high return on their investments;
- sharp increasing of earnings;
- low real interest rate.

The factors affect the supply of credit during the second stage is:
- inflow from parent banks;
- increasing local savings due to good economic activity;
- low "price" of attracted funds;
- low level of debt in different sectors;
- positive economic results.

The third stage of the credit cycle is after the 2008 crisis. During this period, the factors affecting demand are:
- income falls or keeps on the same level in real terms;
- real estate prices have fallen;
- increasing of BGN equivalence in foreign currency loans.

The factors influencing the supply are:
- recovering part of the deposits lost by banks during the crisis;
- reducing risk in the economy;
- economic activity slowly recovers. The return of projects is increased and therefore companies tend to be financed at a higher cost of the loan;
- positive outlook for income growth and a propensity for consumption, which leads to increased willingness to use the loan.

Credit data show certain risks for changes of supply and of demand, as reflected in:
- Problem with "bad" credits as well as solvency of borrowers. This risk can be minimized by upgrading the credit risk assessment system and methods. It has been achieved by introducing a centralized risk assessment system with issuing credit score for each borrower. At the same time risk assessment methods have to become much more objective and unified.
- An accounting of lost and the separation of sustainable legal provisions requires a more accurate assessment of the liquidity of the collateral offered and the creditworthiness of borrowers before a credit decision is taken.
- Increased number of partially secured loans. Often, by the lack of first-class collateral by borrowers, banks create a special pledge of commodities, output and uncompleted production, as well as customer receivables, which in most cases are low-liquid assets. These losses for the bank by collateral due to the poorly developed secondary market for more specific types of production and the uncompleted production, as well as the large amount of non-performing receivables whose quality is not always analyzed and taken into account when assessing the collateral offered. The bank lending to risky customers, due to the existence of "good" collateral, as well as lending to solvent customers with "bad" collateral, may worsen the bank loan portfolio. Each bank must ensure that the creditworthiness of the client is consistent with the quality of collateral offered to

minimize the risk of default on repayment of the loan.

- A number of banks increase the growth rate of lending to firms with negative development trends. It needs to be taken into account when assessing the credit policy. The payment of commissions and interest by the borrower provides bank income. In some cases, in order to alleviate the monthly repayment, long-term loans are granted for small monthly amounts and additionally they use to cover operating costs, for short-term purposes.
- With a relatively small number of high profitable companies, the commercial banks can be increased the share of overdraft to finance the working capital. It will considerably reduce the credit risk and will help to improve the financial situation of the companies. By overdraft do not imply a high profitability for banks because the funds finance purchased of goods and materials do not bring the income. The payments of the principal and the interest come after the sales of goods and production.
- Investment projects - relatively few qualitative investment projects high rate of return applies for bank investment credits.
- Own funds by lending - the next problem for obtaining loans in Bulgaria is very low amount of own funds (an essential condition for granting an investment bank loan). The companies have a low capital base. The attracted funds include the obligations to banks and the same towards: suppliers, staff, budget, National Social Security Institute, National Health Insurance Fund, etc. If they invest more own funds in their projects, more trust will gain in their creditors.
- Lending and capital adequacy. Many companies as borrowers for promising investment projects and at the same time reported a loss for the previous year and uncovered losses from the previous few years. With the exception of several single cases, Bulgarian entrepreneurs do not agree to recapitalize their company by attracting new partners or new major shareholders, who would have contributed additional capital.
- The reasons for the insufficient number and size of loans servicing the Bulgarian economy is the relatively unsatisfactory bank management and the insufficient knowledge of the bank credit officers and senior bank managers of the competitiveness in the different sectors and sub-branches of small and medium-sized companies.
- Export activity of Bulgarian companies - as a further problem for obtaining the credit of small and medium-sized companies is relatively weak exports of these enterprises. This problem is possible be resolved by setting up specialized banks and funds that they grant credits and issue guarantees or cover differences between market and preferential interest rates of loans to Bulgarian producers, which have an export orientation. Priority should be given to the possibility of obtaining financial resources from international financial markets by the support of providing state guarantees or by issuing government guaranteed bonds. In the same time, Bulgarian banks for stimulating the export need to accumulate enough resources.

- Capital market and credit level - underdeveloped capital market in Bulgaria. The relationship between bank and bond lending and the absence of the latter (with a few exceptions) is one of the most significant reasons for the credit restrictions of banks on the real economy. In order to satisfy the needs of a mortgage loan in Bulgaria and the greater implementation of the Mortgage Bonds Act, adopted in 2000, should be created with public sources at least one mortgage bank. With the establishment of a mortgage bank could use with long-term cash resources through the issue of mortgage-backed real estate bonds.
- Rapid credit growth in the banking system may also trigger shocks by worsening macroeconomic stability and loan quality. The rising of the current account deficit (directly related to the credit boom) along with inflationary pressures make the economy vulnerable to macroeconomic shocks. For example, a sudden turnaround in the direction of foreign capital or some other "shock" would lead to severe consequences - a rise in interest rates, a slowdown in growth, a decline in asset prices.

Conclusion

The banks play a special role in the financial system. Some economic actors have less access to other forms of funding than to banks. For the period 2003-2008 the lending constantly increases. The conditions of the crisis in 2008 include: a gradual decline in the lending rate in 2008 from 38.45. % in the first quarter to 2.27% in the fourth quarter for business and lower for household loan to 5.79% at the end of 2009. For the period 2010-2015, households' trends are also descending, but with lower fluctuations - from minus 0.81% at the end of 2010 to minus 1.79% at the end of June 2015.

Different factors related to the supply and demand of credit influence of their amount. Higher domestic consumption and investment depend on the lending and therefore it could be actively used as an instrument for stimulating of economic growth.

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PAPER

The Human Capital Role in the Process of Transformation of Chinese Manufacturing Enterprises

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Abstract Under China's supply-side reform, to transform and upgrade has become the inevitable choice to develop Chinese manufacturing enterprises. Human capital is a strategic premise for manufacturing enterprises to transform and upgrade, and this is why it is particularly urgent for Chinese manufacturing enterprises to implement human capital strategy.

This paper first states the status quo of human capital of Chinese manufacturing enterprises, then discuss the characteristics of core competencies and human capital at different development phases through analyzing the developing path of manufacturing enterprises for transformation and upgrade, and finally proposes the corresponding human capital strategy for Chinese manufacturing enterprises to transform and upgrade.

Keywords: Chinese manufacturing enterprises; core competence; characteristics of human capital; human capital strategy; transformation and upgrading.

JEL classification: J24 ; O15; F16

1. Introduction

Since the reform and opening-up, the manufacturing strength of China has greatly improved, and China has become the world's largest manufacturing country. However, compared with developed countries, manufacturing industry of China is still mainly in the low-end links in the international division of labor. Increasing labor costs, overcapacity, lack of technical competitiveness, rising purchase prices, per capita efficiency bottlenecks and other problems plague most of Chinese manufacturing enterprises, so the transformation and upgrade of manufacturing enterprises are imminent. "The purpose of industrial upgrading is to improve labor productivity, especially the total factor productivity, which reflects the higher requirements for human capital of labor force". [1] The "Made in China 2025" describes a magnificent

[1] Cai Fang, Wang Meiyan. For the future economic growth accumulation of human capital [J]. Shanghai

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blueprint of the construction for manufacturing power, takes the human capital as the fundamental to build manufacturing power, and puts forward the new and higher requirements for human capital development.[2][2] To this end, this paper focuses on the transformation and upgrading of manufacturing enterprises and human capital strategy.

This paper first states the status quo of human capital of Chinese manufacturing enterprises，then discuss the characteristics of core competencies and human capital at different development phases through analyzing the the developing path of manufacturing enterprises for transformation and upgrade, and explores the corresponding human capital strategy to build organizational competitive competencies, hoping to provide a theoretical and practical reference for Chinese manufacturing enterprises to carry out the effective human capital strategy to realize the transformation and upgrading.

2. The Status Quo of Human Capital Development in Chinese Manufacturing Industry

2.1. The Overview of Human Capital in Chinese Manufacturing Industry

Since the reform and opening-up, the total amount of human capital in Chinese manufacturing industry has been increasing. The data shows: the number of manufacturing enterprises is 358,665 in 2015,[3] an increase of 1.79% over the previous year; the average number of employees increases from 52, 3615 million in 2010 to 87.1095 million in 2015, and the growth trend maintains(See fig.1). With the market gradually becoming the basic way to allocate labor resources, China initially establishes the market model of manufacturing human capital development.

The expenditure of national finance for education has increased significantly, and the per capita human capital increased from 28,000 yuan in 1985 to 121,000 yuan in 2014, [4]which lays a good foundation to develop human capital. Meanwhile, human capital investment channels continue to expand.

Personal and family education spending has increased significantly, and has become an important source of human capital development.

Enterprises fully participate in vocational education and become the main part of investment, especially carry out joint research activities with various schools, and at the same time strengthen employees' training.

Manufacturing enterprises and education system form a mutually beneficial cooperation through the transfer of technical results, commission development, joint development, and the establishment of technology development agencies which carry out various forms of production and research cooperation.

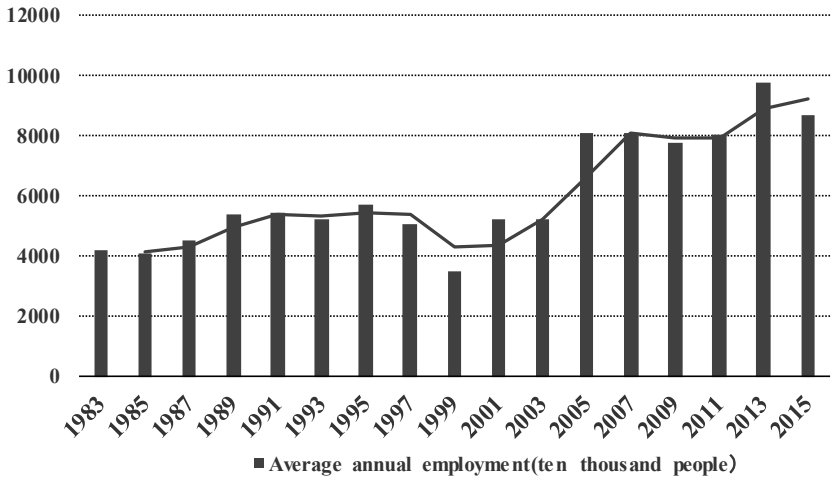
Fig. 1. Average annual employment of China manufacturing enterprises (ten thousand people)

Social Science Community Eleventh Academic Annual Meeting, 2013 (10): 15-21.

[2] Shao Anju. Upgrade Path and Countermeasures from "Made in China" to "Quality Manufacturing" [J]. Economic Aspect, 2016 (6): 42-46

[3] China Statistical Yearbook in 2016, http://www.stats.gov.cn/tjsj/ndsj/

[4] Dou Zhengyan, Gao Wenshu. Study on human capital accumulation in manufacturing under the background of China's economic transformation [J]. Human Resources Development of China, 2016 (3): 89-94.



Data source:《China Statistical Year Book》&《China Industrial Economic Statistical Year Book》

2.2. Insufficiency in the Total Amount of Human Capital in Chinese Manufacturing Industry

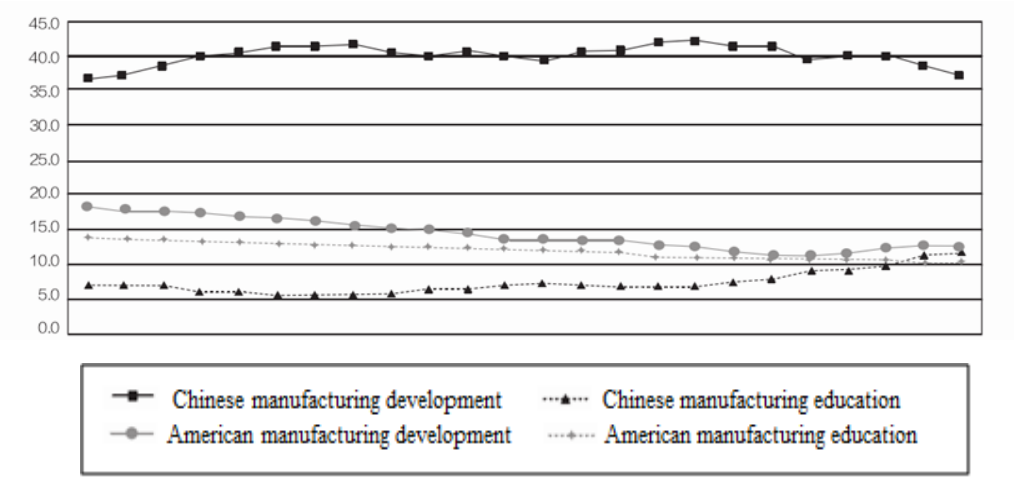
In terms of quantity, China's human resource is very rich. However, compared with developed countries, the level of human capital development in China is lower, far behind the needs of the transformation and upgrading of China's manufacturing industry. Compared with the developed countries in Europe and America, the human capital development of China is lagging behind, especially in the manufacturing human capital education and training system. The United States, Germany, Japan and other developed countries have established a systematic and complete manufacturing talent education/ training system to provide high-quality human capital for the manufacturing industry, thus helping the manufacturing enterprises to build up the foundation for technological progress and development.

In contrast, human capital investment, education and training in China's manufacturing industry have not yet formed a complete and scientific system. China's investment, education and training system are still rigid with a "planned color", which is difficult to reflect the reality of the market demands, leading to the mismatch of human capital resources. This has not only led to the loss of educational resources and investment, but also caused talent shortage-especially of skilled human capital and high-end technical talent development lag.[5]

In general, the level of human capital in China is seriously lagging behind the overall level of economic development of the country. Among them, the development of manufacturing human capital is far from the requirements of transformation and upgrading of manufacturing industry (see Fig. 2), which to some extent restricts the pace of Chinese manufacturing transformation from the low-end links to the high-end links in the global manufacturing chain.

[5] Ibid.

Fig. 2. Comparison of Sino-US Manufacturing Development and Education in 1992-2015



Data source: "China Statistical Year Book" and "World Economic Development Report"

2.3. Shortage of Skilled Human Capital in Chinese Manufacturing Industry

Although the quality of China's human capital has improved greatly since the reform and opening-up, it is still lower compared with developed countries, which has become a bottleneck for Chinese manufacturing industry competitiveness. First, the low quality of human capital is difficult to adapt to technological progress and the requirements of high-end links in the industrial chain. It can bring negative impacts on learning by doing and restrict the sustainable development of human capital capacity. Second, China's skilled human capital has a greater gap between supply and demand. The report released by the monitoring center of labor market information network in China shows that the demand rate of various skilled human capital is above 1 since 2005. The demand rate of technician, senior technician and senior technical staff further had been climbing to 2.3-2.7 in 2014.[6] Therefore, there is an increasing trend for the gap between supply and demand of skilled human capital in China.

In short, shortage of high-quality human capital and the structural problem of human capital has seriously restricted Chinese manufacturing enterprises in enhancing their technical capacity and achieving their transformation and upgrading. How to build effective human capital to satisfy the need of core capability in manufacturing transformation and upgrading has become an important problem to be solved urgently by manufacturing enterprises.

3. The Core Competency and Human Capital at Different Developing Phase in Transformation and Upgrading of Chinese Manufacturing Enterprises

Human capital is an important supply factor of innovation, undoubtedly an essential strategic resource for the transformation and upgrading of manufacturing enterprises.

[6] Ibid.

However, different transformation and upgrading strategies have different requirements for the "suitability" and "effectiveness" of each enterprise's human capital. Based on the global value chain theory and the model of transformation and upgrading of enterprises,[7] [8] [9] this paper divides the transformation and development path of Chinese manufacturing enterprises into three phases: OEM（Original Equipment Manufacture）, ODM（Original Design Manufacture）and OBM（Original Brand Manufacture）, i.e., from OEM to ODM to OBM. The path shows that the process of transformation and upgrading of manufacturing enterprises is the process of expanding the scopes of "value chain activities" on the basis of continuously upgrading its "core competencies". [10] In this process, each manufacturing enterprise at different phases has different characteristics and faces different problems and difficulties, requesting to build different human capital to ensure the required core competencies to promote the transformation and upgrading of manufacturing enterprises.

3.1 The Core Competencies and Human Capital at OEM Phase

At OEM phase, OEM enterprises assemble and manufacture according to product specifications and designs provided by the brand customers, and they also deliver goods in accordance with customer-specified forms. OEM enterprises involve only assembly and manufacturing activities in the value chain activities. In general, the core competencies of OEM companies rely on low cost, scale effect, and efficient manufacturing. The enterprise's competitive strategy at this phase is to strengthen its processing and manufacturing capacity to solidate its position in the value chain. In the production process of OEM phase, enterprises gain the competitive advantage through mastering and constantly improving the production process of midstream products. This advantage allows enterprises to continue to obtain a large number of commissioned processing orders and stable profits. Therefore, the human capital required by enterprises at this phase is mainly production-oriented human capital.

Production-oriented human capital is production line employees who can find and solve problems in production practice by mastering the production process and enterprise technology, also with high operating skills. It is essential for OEM manufacturing enterprise to own a large number of various types of production-oriented human capital. Production-oriented human capital can understand and master the company's production processes, so receiving more skill trainings. It is more helpful to discover the deficiencies of existing production process, improve the level of enterprise technology, reduce production costs, improve product quality and gain competitive advantages. In addition, the learning curve effect of production-oriented human capital is

[7] Hobday M.. East Asian Late Comer Firms: Learning the Technology of Electronics□J□.World Development, 1995 (23) : 71-93

[8] Mao Yushi, Dai Yong. OEM, ODM to OBM: Research on Independent Innovation Path of Enterprises in Emerging Economy [J]. Economic Management, 2006 (10): 10-15

[9] Amsden, A., 1989, Asia's Next Giant: South Korea andLate Industrialization, New York, Oxford University Press.

[10] Yang Guiju. Foundry enterprise transformation and upgrading: the evolution of the theoretical model of the path [J]. Management of the world, 2010 (6): 132-142.

more obvious.[11] Learning curve effect is an important return on the production-oriented human capital investment. With the increasing work proficiency, the time required at the same work is reduced, bringing the increasing marginal returns to the enterprise.

3.2. The Core Competencies and Human Capital at ODM Phase

At ODM phase, ODM enterprises not only have efficient assembly and manufacturing capabilities, but also have a complete product development and design capabilities. ODM enterprises not only engage in assembly and manufacturing activities, but also involve in R&D and other value chain activities. In general, the core competencies of ODM enterprises lie in R&D design capabilities and business control capabilities. At this phase, the main competitive strategy of enterprises is to transform the manufacturing capacity to R&D design capabilities in order to further enhance the level of technology, reduce costs, improve quality and enhance innovation and brand awareness. From production-oriented to brand-oriented, from low-end value chain to the high-end value chain upgrading, at this phase, enterprises must ensure the production and manufacturing capacity as well as the training to strengthen knowledge and operation skills in the management and R&D. The human capital required by enterprises is mainly firm-specific and innovation-oriented human capital at this phase.

Firm-specific human capital reflects the value of employees that is unique to a single firm. It grows with tenure and experience in the enterprise. Its growth is accelerated by in-house training and structured programs of movement through related jobs. Firm-specific human capital is distinguished by its special value to the employer in which it is developed; thus, it is less marketable to other organization. [12] Innovation-oriented human capital reflects that employees have attributes and qualities to ask questions, solve problems, and create a new situation of cause. Firm-specific and innovation-oriented human capital is the important condition at ODM phase. Because the core values required at this phase focus on diligence, pragmatism and excellence as well as emphasises on innovation and ownership. Product innovation requires not only employees to carry out long-term knowledge development in their jobs, the systematic and group knowledge, but also the need for them to creatively apply knowledge and create new knowledge through connection and integration.

Meanwhile, human capital is required to communicate and collaborate with other functional departments within the enterprise to obtain information and knowledge. Enterprises only with long-term knowledge learning and development, reverse innovation and other ways can gradually reach the deep in the value chain. Japan and South Korea have spent a long time on the upgrading in the manufacturing value chain from manufacturing to the R&D design, and have developed firm-specific and innovative human capital.

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[11] Yu Maozhao. Specific human capital and the transformation and upgrading of China's manufacturing enterprises [J]. Contemporary Economic Management, 2014 (9): 52-56.

[12] Haig R. Nalbantian, Richard A. Guzzo, Dave Kiffer and Jlay Doherty: Play to Your Strengths Managing Your lnternal Labor Markets for Lastng Competitive Advertage, New York: McGraw-Hill, 2004

The human capital is not able to be obtained in the market by way of purchasing but only developed gradually via company's internal training and "learning by doing".

3.3. The Core Competencies and Human Capital at OBM Phase

At OBM phase, OBM enterprises can develop their own products and delivery its own-brand products. Apart from complete product productions and design capabilities, OBM enterprises should invest in brand, channels, after-sales service and other business activities. In general, OBM's core competencies lie in brand marketing capabilities, channel and branding capabilities, higher productivity and faster multi-directional communication, more cohesive and team player, and the comprehensive utilization of resources, which are challenges for many enterprises. Therefore, the human capital allocated by enterprises at this phase is mainly business human capital and interdisciplinary human capital.

Business human capital refers to a human capital with broad knowledge and all kinds of management ability (such as analysis and judgment, comprehensive decision making, organization and coordination, learning and innovation) and can optimize the allocation of resources. It is a kind of heterogeneous human capital with increasing marginal returns capital. Interdisciplinary human capital is a multi-functional human capital, which shows the interdisciplinary and various abilities in many areas, setting business knowledge, network information technology, marketing and other knowledge and skills in one of the human capital.

At the OBM phase, the production of advanced manufacturing products will need to continuously absorb the electronic information, computers, machinery, materials, modern management technology and other aspects of high-tech achievements, and these advanced manufacturing technologies integrate with application of manufacturing products R&D design, manufacturing, testing, marketing services and management of the whole process.

In addition, with the development trend of globalization, network, knowledge and information technology in the world economy, enterprise innovation system has experienced the transformation from a single closed R&D system to an opening innovation system integrated with R&D, manufacturing and market. [13] If an enterprise wants to improve the efficiency and effectiveness of manufacturing upgrading, it requires a large of business & interdisciplinary human capital to achieve information, automation, intelligence, flexibility, ecological production and economic and social and market results.

Summary of the core competencies and human capital at different phases of manufacturing transformation and upgrading can be described in the following table (See Table 1).

[13] Zhao Shuming, Bai Xiaoming. Innovation-driven enterprise talent development research [J]. Journal of South China Normal University, 2016 (5): 93-98.

Table 1. The Core Competencies and Human Capital at Different Phases of Transformation and Upgrading of Manufacturing Enterprises

Business phase	Core Competencies	The Characters of Human Capital	Purpose of Transformation and Upgrading
OEM phase	Low cost, scale efficiency, Efficient processing and manufacturing capacity	Production-oriented human capital	From OEM to ODM phase
ODM phase	R&D design capability, Business control capability	Firm-specific & Innovation-oriented human capital	From ODM to OEM phase
OBM phase	Marketing capability, Brand operational capacity	Business & interdisciplinary human capital	From present to bigger and stronger

4. The Human Capital Strategy at Different Developing Phase in Transformation and Upgrading of Chinese Manufacturing Enterprises

By the above analysis, we can see that the core competencies of manufacturing transformation and upgrading at different phases are different, so the characteristics of human capital are different too. It is necessary for manufacturing enterprises to make innovation as the guidance, select the appropriate human capital strategy to develop human capital capacity and improve organizational innovation according to the characteristics of human capital needed at different phases of manufacturing transformation and upgrading.

4.1. The Human Capital Strategy at OEM phase

OEM manufacturing enterprises need to cultivate low-cost, economies of scale and high-efficiency core capabilities of the manufacturing and manufacturing personnel, and to focus on the development of production-oriented human capital in order to promote the transformation and upgrading from OEM to ODM. At OEM phase, the human capital strategy is as follows:

1. Pay attention to production-oriented human capital investment. The development of human capital in this period mainly reflects on the growth scale. Enterprises should be through external recruitment and internal training to form a certain number and quality of human resources for enterprise manufacturing capacity and efficient customer response to the formation of the foundation.
2. Enhance the employees' quality consciousness. Enterprise should make the employees realize the importance of ensuring the product quality, enhance the employee's sense

of responsibility, improve the comprehensive performance of employees and improve production efficiency and product quality through various forms of training, business skills competition, strict quality inspection and control, etc.

3. Provide various incentives. Enterprise should create a more harmonious and friendly working environment, enhance the sense of belonging, identity and loyalty, better encourage employees to consciously improve the efficiency of the enterprise employee, remain enterprise employee liquidity at a lower level, form the basis for stable production through a variety of means such as the enterprise culture, salary incentive and welfare improvement.
4. Implement humanized management. Enterprise should change the past management concept to make employees not only management objects but also clients; care about the attitude, career planning and cultural quality of employees; and achieve flexibility and flexibility in the work system as well as scheduling and production scheduling to fully tap the strengths and advantages of employees and also respect employees' personality.

4.2. The Human Capital Strategy at ODM phase

At ODM phase, manufacturing enterprises need to cultivate the ability to enhance organizational R&D design and business control capabilities, focusing on the development of firm-specific, innovative human capital in order to promote the transformation and upgrading from ODM to OBM. At ODM phase, the human capital management strategy of the enterprise is as follows:

1. Guide and stimulate employees to participate actively in firm-specific, innovation-oriented human capital investment. Enterprises should set the priority of human capital investment ideas, continue to increase investment, accumulate employees' firm-specific and innovation-oriented human capital investment enthusiasm and encourage employees to participate in professional skills training to meet the need of technical progress and innovation in the enterprises' transformation and upgrading. Enterprises should motivate employees to consciously participate in multi-skilled on-the-job training adapting to the rotation of the flexibility and improve production efficiency and innovation.
2. Create actively an atmosphere for innovative employees' growth. Enterprises should build a good environment and an open cultural atmosphere for the sustainable development. Enterprises should create a good system environment, working environment, research environment and living environment, create a strong human capital atmosphere with respect，cherishment，love and good care for talents from top to bottom within the industry and the enterprise and also maximize employees' enthusiasm and promote employees' innovation and vitality so that all kinds of professional and technical talents can play a key role.
3. Establish a long-term labor contract. The achievement of firm-specific and innovative human capital mainly depends on "learning by dong", and needs a longer period for human capital accumulation in knowledge and experience. Only if an enterprise

provides long-term labor contracts to employees, employees are willing to invest in firm-specific and innovation-oriented human capital. Japan and Germany in practice are using long-term employment systems, providing a guaranteed job for technical backbone employees.[14] It not only greatly promotes the employees' human capital investment in firm-specific and innovation-oriented capabilities, but also the development of its advanced manufacturing.

4. Implement human capital equity incentive. Equity incentives are one of the most effective incentives.[15] Enterprises can motivate employees through equity arrangements for skilled human capital investment. Among them, the most important means are to make specific, innovation-oriented human capital access to the enterprise's residual claims as corporate shareholders, enjoy the fruits of enterprise development, and completely improve its human capital investment income. From the practical experience of developed countries such as the United States and Germany, we can see that because of the long-term incentive for employees with specific and innovation-oriented human capital, it has promoted the accumulation of human capital and promoted the transformation and upgrading of manufacturing enterprises.

4.3. The Human Capital Strategy at OBM phase

At OBM phase, manufacturing enterprises need to cultivate organizational marketing ability, channel and brand operation ability of talent, focus on the development of business and interdisciplinary human capital in order to achieve organizational bigger and stronger goals. At the OBM phase, the human capital management strategy of the enterprise is as follows:

1. Increase the business and interdisciplinary human capital investment. Enterprise should build a comprehensive system of human capital development, speed up the establishment of a sound scientific and rational human capital development mechanism, and increase the business and interdisciplinary human capital investment and nurture in the recruitment, configuration, training, promotion, career development and other aspects. Enterprise should also cultivate interdisciplinary talents through the creation of internal self-management and creative platform, across the organizational boundaries to stimulate the spirit of independent innovation and ability to promote corporate human capital structure and organizational business strategic adjustment.
2. Build innovative, open, cooperative and shared ecosystems[16]. Enterprises should not only strengthen the existing internal talent training and development, but also focus on obtaining senior personnel through the head hunting, network platform and other external media accesses. Meanwhile, enterprises should establish a new global thinking of human capital supply, from regional integration of human capital

[14] Gao Yan. Enterprise human capital management research [M]. Beijing: China Economic Publishing House, 2011.p57.

[15] Jack J.Phillips: Investing in Your Company's Human Capital, AMACOM, 2005.p113

[16] Shao Anju. "China made" to "high-quality manufacturing" to upgrade the path and countermeasures [J]. Economic aspect, 2016 (6): 42-46.

capacity to its global intergration. Instead of seeking all human capital, enterprises should use human capital and effectively integrate various types of enterprise resources, knowledge and ability to form a "mutual benefit" community.

3. Diversify incentive methods. Enterprise should innovate the employment relationship model, support the human capital partner and other institutional innovation. The staff contribution and encouragement closely linked to enhance the staff self-management ability and participation in the interactive will promote human capital and monetary capital of the enterprise co-governance, sharing and win- Enterprise human capital value chain. Huawei's employee shareholding plan and Haier are examples of human capital initiative. At the same time, through the establishment of special incentive funds and the principal system, enterprises encourage professional, technical personnel and outstanding top-notch talent come and talent can gain fame and fortune.
4. Create the corporate culture of "artisan spirit". Advocate love, dedication and the professional attitude of excellence. Create a firm-specific staff, pragmatic, and the work of the atmosphere. Establish the "quality is the life of the enterprise", "quality in my hands" business philosophy. [17] Use "operational master contest" and "job skills training" and other labor competition activities to stimulate employee's work enthusiasm to improve job skills. Establish training mechanisms, and more ways to enhance employee's job skills and comprehensive quality, to create a self-driving force to promote enterprise development.

Summary of human capital development strategy of manufacturing enterprises at different phases can be described in the following table (See Table 2).

Table 2. The Human Capital Strategy of Manufacturing Enterprises at Different Phases of Transformation and Upgrading

Business Phase	Core Human Capital	Human Capital Development Strategy			
		Recruiting and Configuration	Training and Development	Incentive System	Performance Evaluation
OEM Phase	Production-oriented human capital	A large number of recruitment of skilled workers, emphasize the staff responsibility	Production skills and quality, consciousness training	Material incentives, supplemented by welfare conditions for improvement and cultural construction	Production-oriented evaluation system

[17] Wu Aihua, Su Jingqin. Human capital specialization, innovation ability and new product development performance - based on the type of technological innovation empirical analysis [J]. Science Research, 2012,30 (6): 950-960.

Business Phase	Core Human Capital	Human Capital Development Strategy			
		Recruiting and Configuration	Training and Development	Incentive System	Performance Evaluation
OBM Phase	Business & interdisciplinary human capital	Merger, headhunting access to senior talent, global talent exchange interaction	Both internal and external, comprehensive development	Diversified incentives, innovative corporate employment relationships	Business - oriented & comprehensive evaluation system

5. Conclusion

Under China's supply-side reform, transformation and upgrading has become the key to achieve the sustainable development of Chinese manufacturing enterprises. The transformation and upgrading of manufacturing enterprises needs the integration of various factors such as market, system and enterprise ability. The human capital is an important strategic condition for Chinese manufacturing enterprises to realize the transformation and upgrading. Chinese manufacturing enterprises should not only pursue the low cost strategy in the transformation and upgrading. They should carry out the effective human capital strategies and develop their human capital competence based on the development strategy at different phases of transformation and upgrading in order to encourage employee's initiatives, improve labor productivity and organizational innovation, and acquire the sustainable competitive advantage.

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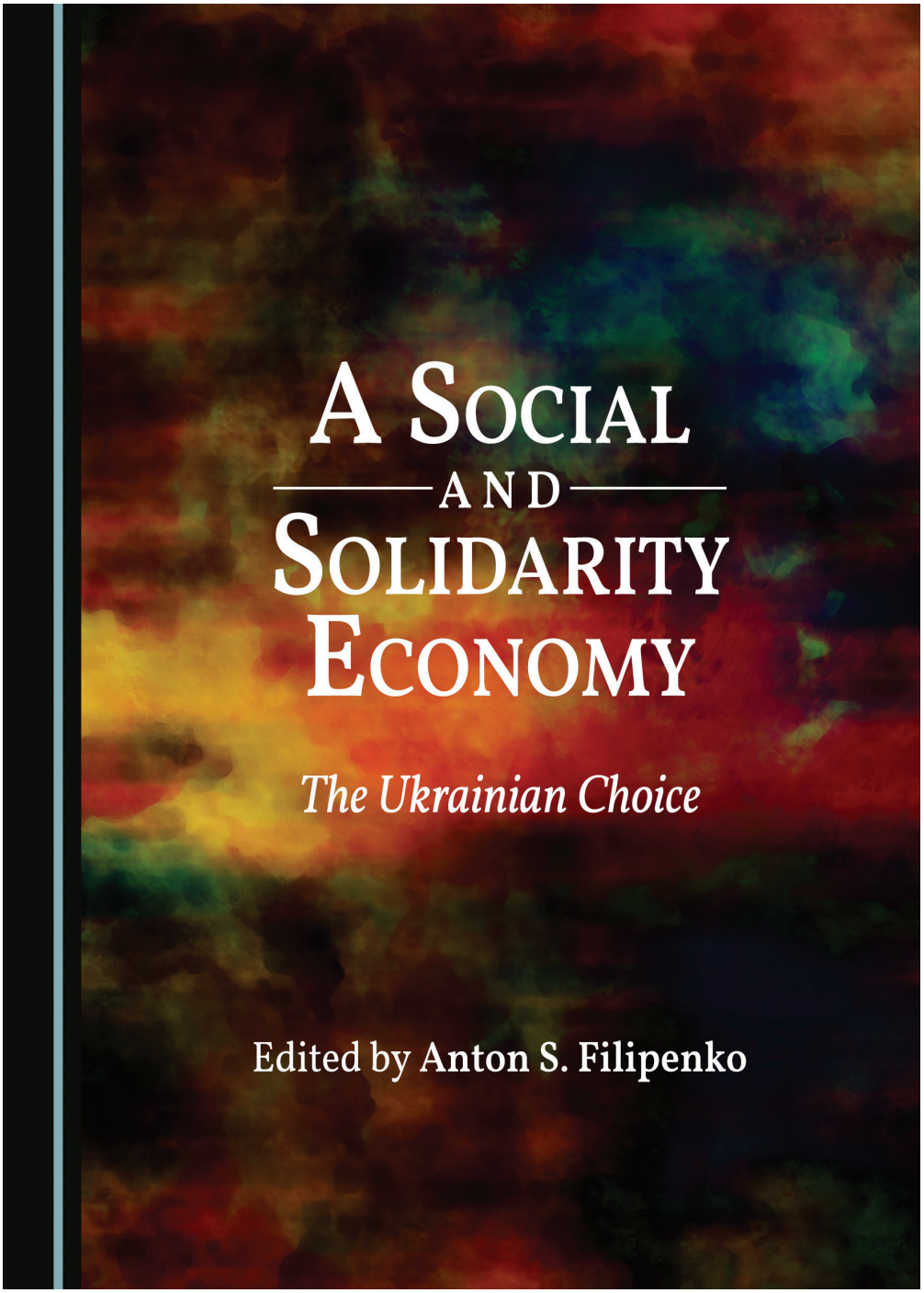
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PAPER

The Impact of Views on International Portfolio Selection

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Abstract We adopt the Black and Litterman approach in order to find optimal international portfolios and to investigate the sensitivity of their weights to investor's subjective views. We consider fifteen international asset classes and two different sets of views. The results show that BL portfolios can have very different features changing the views, but they are coherent with the views themselves. Resulting portfolios are relatively highly concentrated in asset classes with the better perspectives and present strong negative weights in asset classes with the worst views. We repeat the trials excluding short selling: in the first scenario we obtain well diversified portfolio, while in the second the effect of views gives a more concentrated portfolio.

Keywords: Asset allocation; Market portfolio; Reverse optimization; International optimal portfolios.

JEL classification: C1; G11

1. Introduction

The Markowitz (1952) allocation model provides the basis for modern portfolio theory. Focusing on a suitable restriction of the feasible portfolios based on the mean-variance criterion, the model allows the investor to find the proper optimal portfolio weights. Nevertheless, it often suggests highly concentrated portfolios with high short selling, and it suffers from input sensitivity.

The next fundamental step in portfolio theory is the famous Capital Asset Pricing Model (CAPM) proposed by Sharpe (1964), Lintner (1965) and Mossin (1966) . Their equilibrium framework simplifies greatly the investor problem and points out that the only relevant risky portfolio is the market portfolio: this takes to a world where all investors make exactly the same choices in terms of the risky assets' internal composition, whatever their financial perspectives: the only degree of freedom concerns the amount to be invested in the riskless asset and the remaining amount is allocated in the market portfolio. This means that equilibria assumptions necessarily materialize in unsophisticated investors. The Black Litterman model (1991, 1992) overcomes the problems arising with Markowitz model on one hand and enables

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investors to embedding their personal views in their optimal portfolio choices.

BL adopt a Bayesian approach to combine the investor subjective views on assets expected returns with the market equilibrium expected returns to form a new estimation of expected returns. The resulting new vector of returns becomes the new input to Markowitz optimization problem and it leads to well diversified portfolios, coherently with the views. In this paper we apply BL model to an international portfolio of fifteen asset classes (equity, government bond an real estate indices of Europe, US, Russia and China) and investigate the impact of two different set of views on the optimal portfolio weights.

Section 2 describes the Markowitz and Sharpe, Lintner and Mossin frameworks together with Black and Litterman model. Section 3 shows the data, illustrates the views and exhibits the results (first in presence and then in absence of short selling). The last Section 4 contains conclusions and comments.

2. Portfolio selection

2.1 The classical Markowitz model

The Markowitz (1952) work represents a milestone in portfolio theory. The powerful idea is to focus on what is really important in portfolio decisions, that is to restrict the attention to a subset of portfolios that Markowitz names efficient frontier, instead of considering all possible choices and establishing selection criteria for a single investor. The subset can be found following simple rules when stochastic portfolio return is completely characterized by its mean and variance (this is a crucial and critical point in the model): all investors select their specific optimal portfolio within those minimizing variance for a fixed level of expected return and maximizing expected return for a fixed level of variance. The subset represents a great restriction with respect to all initial feasible portfolios. The techniques developed by Markowitz allows to specify the optimal portfolio composition (the weights) together with its mean and variance once the single investor preferences are specified. More in detail, starting from a set of n stocks and one riskless asset and dealing with a single period horizon, a Markowitz styled investor needs to estimate the n expected asset returns, the riskless asset return and the variance and covariance matrix of asset returns: solving the problem of minimizing portfolio variance for (any) fixed level of portfolio expected return, he finds the minimum variance frontier and a suitable restriction gives the efficient frontier (it is not necessary to solve the other side of the optimization problem). On the basis of the investor preferences (more or less risk adverse), the investor chooses a point on this frontier and he knows exactly how much to invest in any asset in order to obtain the portfolio with return mean and variance corresponding to the point. Unfortunately, the optimal weights are too much sensitive to input data, in particular with respect to the asset mean return vector as pointed out by many financial studies. The development of Markowitz model, due to Sharpe (1964), Lintner (1965) and Mossin (1966) is the famous Capital Asset Pricing Model (CAPM): starting from equilibria assumptions it shows that all investor decisions differ only in terms of the riskless asset weight and the weight of a completely risky portfolio which is the same for all investors (the market portfolio). The optimal composition of the market portfolio is invariant, so that the Markowitz problem

reduces to evaluating the market weights. In this equilibrium framework, first of all it is necessary to identifying the market portfolio: it should be a portfolio containing all the assets all over the world and it is obviously impossible to deal with it. The solution can be referring to a benchmark portfolio with a certain number of specified assets and the weights should be the percentage of benchmark (market) capitalization. Again, solving the Markowitz problem in order to find the benchmark weights gives answers very far from benchmark capitalization percentages because of input data, especially the expected asset returns (Sharpe (1974)).

The next Section is devoted to a model that suggest a way to overcome this criticism and to incorporate personal views in the optimal portfolio weights.

2.2 The Black and Litterman model

Black and Litterman (BL, 1991) start from the idea that the benchmark (market) portfolio weights are known, e.g. they are benchmark (market) capitalization weights. These weights becomes an input of the problem, together with the (historical based) variance-covariance matrix of the assets return. This allows to find the expected return vector implicit in the benchmark. This process is called reverse optimization (Sharpe (1974)), because in this way BL use the Markowitz optimization technique in order to find the expected assets return instead of the optimal weights. This is more reliable than statistic based estimations. BL suggest also a Bayesian approach in order to keeping into account of investor personal views. Without views, the BL implicit expected returns vector can be used as input of the Markowitz problem and the solution in terms of weights gives again the benchmark portfolio. Views can be absolute, e.g. the investor can affirm that a specified index will grow by 3% over the next year, or relative, e.g. the investor believes that an index will outperform another index by 25 basis points (bp). In the BL framework the views allow the investor to find the expected return vector "adjusted" to his views (or BL expected return vector): this vector is the new input together with the historical variance and covariance matrix in the Markowitz optimization problem. Solving the problem the investor finds the BL optimal weights.

BL procedure requires a lot of mathematics to be formalized, so we suggest the interested reader to see the paper by Idzorek (2002) who describes the technique in a very detailed way, with useful examples.

3. Empirical Results

3.1 Data

Weekly data from Bloomberg and Standard & Poor[1] databases have been used. We have considered three main asset classes, namely equities, government bonds and real estate. The historical quotes are referred to the period April 2015 – March 2018 and pertain to 15 indices, relative to Europe, US, Russia and China. We didn't consider in our analysis the Russian property index because we found only indices with quarterly

[1] Source: Bloomberg Finance L.P. and S&P Dow Jones Indices (a division of S&P Global). Closing adjusted prices have been considered.

instead of weekly data.

More in detail, in the numerical application we used:

STOXX Europe 600 Price Index EUR (Bloomberg ticker: **SXXP** Index): a derivation of the STOXX Europe Total Market Index that has 600 components and represents large-mid- and small-capitalization companies across 18 European countries;
S&P 500 Index (**SPX**): a capitalization-weighted index of 500 US stocks;
MSCI Russia Index (**MXRU**): a float-weighted equity index that captures the performance of the large- and mid-capitalization segments of the Russian market, covering approximately 85% of the float-adjusted market capitalization in Russia;

- Shanghai Stock Exchange Index (**SHCOMP**): is a stock market index of all stocks (A shares and B shares) that are traded at the Shanghai Stock Exchange;
- S&P Eurozone Sovereign Bond 1-3 Years Index (hereafter **EU TB 1-3**): this index measures the performance of Eurozone government bonds with maturities between one and three years;
- S&P Eurozone Sovereign Bond 3-5 Years Index (**EU TB 3-5**): this index measures the performance of Eurozone government bonds with maturities between three and five years;
- S&P Eurozone Sovereign Bond 7-10 Years Index (**EU TB 7-10**): this index measures the performance of Eurozone government bonds with maturities between seven and ten years;
- S&P U.S. Treasury Bond 1-3 Year Index (**US TB 1-3**): this index measures the performance of U.S. Treasury bonds with maturities between one and three years;
- S&P U.S. Treasury Bond 3-5 Year Index (**US TB 3-5**): this index measures the performance of Eurozone government bonds with maturities between three and five years;
- S&P U.S. Treasury Bond 7-10 Year Index (**US TB 7-10**): this index measures the performance of Eurozone government bonds with maturities between seven and ten years;
- Russian Government Bond Index (**RGBI**): a weighted index of Russian government bonds;
- FTSE Global Government Yield China Index (**FGGYCN**): it is an index of average yield on Chinese government bonds;
- Bloomberg Europe 500 Real Estate Index (**BEREALE**): a capitalization-weighted index of all companies that are in the real estate sector of the Bloomberg Europe 500 Index;
- Bloomberg NA REITs (**BBREIT**): a weighted index of US Real Investment Trusts with capitalization not less than 15 million dollars;
- Shangai Property Index (**SHPROP**): this Real Estate Index reflects the overall performance of the real estate sector stocks (both A and B shares) that are traded at the Shanghai Stock Exchange.

For each of these indices, we evaluated the logarithmic return (except for FGGYCN which is yet a yield index) and we estimated the historical expected returns and the variance and covariance matrix.
In order to find the benchmark portfolio weights, we used the market index capitalization

weights; the index values expressed in currencies different from dollars were preliminarily converted using foreign exchange rates quoted on March 30, 2018. The application requires estimation of riskless asset return all over the world: we adopted a null risk free return. In the application of BL model a risk-aversion coefficient is needed. We used an estimation based on the benchmark portfolio ratio between historical mean and variance, that gives a value *3.77* for the coefficient.

3.2 Views

This stage is crucial and represents the most difficult step in applying BL model. We try to express very simple views, but in any case this requires a global perspective involving all indices considered in our analysis. Nevertheless, we underline that the main purpose here is to analyse the impact of views on the optimal portfolio composition and that we consider two very simple scenarios with this aim.

- **1st scenario (1st set of views)**: our personal perspective on equity markets is that US commercial war can be dangerous first of all for China and Russia, but also for Europe. Indeed, there can be commercial revenges and at the end we assume that US equity index will outperform China, Russia and Europe equity indices by 50 bp. Moreover, we assume that US rates are expected to grow and this makes attractive US Treasury Bonds, but dollar foreign exchange rates fluctuations makes bond more risky and less attractive for both foreign and domestic investors. In Europe, ECB intends to reduce quantitative easing, so that government bonds rates should rise becoming more risky. How to convert this situation in a BL view? A synthetic possibility is to think that US and European equity index will do better than respective government bonds index. We suppose that US equity index will outperform all Treasury Bond indices by 500 bp or 5%, while European equity index will outperform all European Government Bond indices by 400 bp. Another view on government bonds is that medium and long term bond will do better than short term bonds (even if in some cases a reverse interest rate curve can be observed now) only by 25 bp. With regard to real estate, we suppose that European housing index will outperform US corresponding index by 50 bp and that the Chinese property index will outperform them by 50 bp;
- **2nd scenario (2nd set of views)**: here we suppose that US equity will outperform European equity by 50 bp. We assume that European equity index surpasses the corresponding government bond indices by 400 bp, but US TB outperform them by 200 bp. US equity exceed US TB by 300 bp. Also Chinese equity is supposed to overcome the Chinese bond index by 400 bp. Last, we let unchanged the views on real estate indices.

3.3 Main Results

The next Table 1 exhibits the expected returns vectors based on historical estimation, those implied by reverse optimization and those obtained following the BL approach under the 1st and 2nd scenarios. We report the differences of all returns with respect to the implied vector and it is easy to see that the historical is far from the implied vector.

Table 1

	Expected returns				Differences		
Asset class	Historical expected returns	Implied expected returns	BL expected returns - 1st scenario	BL expected returns - 2nd scenario	Historical-implied	BL 1st-implied	BL 2nd-implied
SXXP	-1.13%	4.12%	4.50%	2.59%	-5.25%	0.38%	-1.53%
SPX	8.06%	3.88%	4.17%	3.10%	4.18%	0.29%	-0.78%
MXRU	5.75%	4.90%	4.77%	3.73%	0.85%	-0.13%	-1.17%
SHCOMP	-5.70%	3.65%	3.12%	3.18%	-9.35%	-0.53%	-0.47%
EU TB 1-3	0.19%	0.01%	0.02%	-0.01%	0.18%	0.01%	-0.02%
EU TB 3-5	0.83%	0.04%	0.07%	-0.03%	0.79%	0.02%	-0.07%
EU TB 7-10	1.50%	0.11%	0.17%	-0.08%	1.39%	0.06%	-0.19%
US TB 1-3	0.26%	-0.03%	-0.01%	0.05%	0.29%	0.02%	0.09%
US TB 3-5	0.19%	-0.10%	-0.03%	0.18%	0.28%	0.07%	0.27%
US TB 7-10	-0.44%	-0.08%	0.09%	0.49%	-0.36%	0.17%	0.58%
RGBI	7.13%	0.57%	0.55%	0.33%	6.56%	-0.01%	-0.24%
FGGYCN	3.30%	0.00%	0.01%	-0.02%	3.30%	0.00%	-0.03%
BEREALE	-3.20%	3.38%	3.80%	1.93%	-6.57%	0.43%	-1.45%
BBREIT	-1.52%	2.62%	2.84%	2.41%	-4.15%	0.22%	-0.21%
SHPROP	2.13%	4.77%	4.18%	3.64%	-2.64%	-0.59%	-1.13%
High	8.06%	4.90%	4.77%	3.73%	6.56%	0.43%	0.58%
Low	-5.70%	-0.10%	-0.03%	-0.08%	-9.35%	-0.59%	-1.53%

The following Table 2 displays the optimal weights based on historical expected returns, those based on implied returns that coincide with the market capitalization weights and, last, the BL weights (combining implied returns and views) together with the differences between BL and market capitalization weights.

Table 2

	Weights				Differences		
Asset class	based on historical	based on implied=mkt weights	BL weights - 1st scenario	BL weights - 2nd scenario	Historical-implied	BL 1st-implied	BL 2nd-implied
SXXP	-6.84%	19.84%	24.40%	3.50%	-26.68%	4.56%	-16.34%
SPX	13.51%	44.94%	50.56%	46.91%	-31.43%	5.62%	1.96%
MXRU	-1.24%	0.36%	-2.43%	0.36%	-1.60%	-2.80%	0.00%
SHCOMP	-4.27%	9.95%	7.15%	13.39%	-14.22%	-2.80%	3.44%
EU TB 1-3	-386.55%	2.95%	-12.26%	-32.18%	-389.50%	-15.21%	-35.12%
EU TB 3-5	268.46%	2.56%	6.48%	-32.57%	265.91%	3.93%	-35.12%
EU TB 7-10	-34.98%	2.84%	6.77%	-32.29%	-37.82%	3.93%	-35.12%
US TB 1-3	325.16%	5.09%	-16.29%	45.01%	320.06%	-21.39%	39.92%
US TB 3-5	-113.20%	3.51%	15.59%	43.43%	-116.71%	12.08%	39.92%
US TB 7-10	4.95%	1.54%	13.62%	41.46%	3.41%	12.08%	39.92%
RGBI	20.20%	0.15%	0.15%	0.15%	20.05%	0.00%	0.00%
FGGYCN	19.54%	3.53%	3.53%	0.09%	16.01%	0.00%	-3.44%
BEREALE	-4.62%	0.36%	0.69%	-5.24%	-4.98%	0.33%	-5.60%
BBREIT	-2.66%	2.13%	1.47%	9.91%	-4.80%	-0.66%	7.77%
SHPROP	2.54%	0.24%	0.56%	-1.94%	2.30%	0.33%	-2.18%
High	325.16%	44.94%	50.56%	46.91%	320.06%	12.08%	39.92%
Low	-386.55%	0.15%	-16.29%	-32.57%	-389.50%	-21.39%	-35.12%

First of all, Table 2 shows that Markowitz classical optimization based on historical mean return estimations gives unreliable weights in our application. Historical based weights are very far from market (benchmark) capitalization weights and massive short sales of some asset class should be optimal. Coming to BL, in the 1st scenario the optimistic views on US equity reinforce SPX weight by 5.62%, while EU equity rises by 4.56% due to the better perspective with respect to EU TB. The views bring to a reduction of both Chinese and Russian equity weights. BL model suggests to short selling EU and US short term and increasing medium and long term government bonds weights (especially US). Russian and Chinese government bonds percentages remain unchanged, coherently with the fact that there are no views for these asset class. Last, there is a small reduction in US property index, exactly balanced by a growth in EU and Chinese real estate indices.

The 2nd scenario gives rise to a great reduction in EU equity while US equity increase by 1.96%. Chinese equity index increases by 3.44%, balancing the drop in Chinese bonds. RGBI remains unchanged. The most relevant changes refer to US and EU government bonds: BL application suggest high short selling of European in favour of a relevant growth of US bonds. Last, US property index rises by 7.77% while EU and Chinese real estate indices drops, respectively, by 5.6% and 2.18%.

Now, we suppose that short sales are not allowed. Table 3 exhibits BL weights in this situation.

Table 3

	Weights in absence of short sales			Differences	
Asset class	**based on implied=mkt weights**	**BL weights - 1st scenario**	**BL weights - 2nd scenario**	**BL 1st- implied**	**BL 2nd- implied**
SXXP	19.84%	25.12%	20.28%	5.27%	0.44%
SPX	44.94%	47.88%	18.64%	2.94%	-26.30%
MXRU	0.36%	0	0.41%	-0.36%	0.05%
SHCOMP	9.95%	8.86%	11.37%	-1.09%	1.42%
EU TB 1-3	2.95%	0	0	-2.95%	-2.95%
EU TB 3-5	2.56%	0.08%	0	-2.47%	-2.56%
EU TB 7-10	2.84%	0.39%	0	-2.45%	-2.84%
US TB 1-3	5.09%	0	17.52%	-5.09%	12.42%
US TB 3-5	3.51%	6.54%	15.71%	3.03%	12.20%
US TB 7-10	1.54%	4.38%	13.46%	2.84%	11.92%
RGBI	0.15%	0.17%	0.17%	0.01%	0.02%
FGGYCN	3.53%	3.86%	0	0.33%	-3.53%
BEREALE	0.36%	0.70%	0	0.34%	-0.36%
BBREIT	2.13%	2.03%	2.44%	-0.11%	0.30%
SHPROP	0.24%	0	0	-0.24%	-0.24%
High	44.94%	47.88%	20.28%	5.27%	12.42%
Low	0.15%	0.00%	0.00%	-5.09%	-26.30%

In the 1st scenario, the results show again a reinforcement of US and EU equity components: together they represent almost 73% of the optimal BL portfolio. There is a small reduction of Chinese equity (US, EU and Chinese equity gives more than 80%). EU medium and long term government bond are strongly reduced while the corresponding US asset classes grow up by 3.03% and 2.84% (approximately doubled with respect to market capitalization percentages). Russian and Chinese bonds are slightly increased while EU and US real estate indices are slightly reduced.

The 2nd set of views is substantially characterized by a strong reduction (-26.3%) of EU equity and by a strong reinforcement of all US TB indices (around +12% each of them).

4. Conclusions

In this paper we adopt the Black and Litterman approach in order to find optimal international portfolios. BL model has substantially two main qualities: first, its structure grants the possibility to overcome some criticisms arising in applying directly Markowitz optimization techniques and, second, it allows to incorporate personal investor views in the optimal portfolio selection process. In our work, we consider fifteen international asset classes and we investigate the sensitivity of BL optimal portfolio weights to two different sets of views. The results show that BL portfolios can have very different features changing the views, but they seem to be coherent with the views themselves. Resulting portfolios are relatively highly concentrated in asset classes with the better perspectives and present strong negative weights in asset classes with the worst views. We repeat the trials excluding short selling: in the first scenario we obtain well diversified portfolio, while in the second the effect of views gives a more concentrated portfolio. This suggests the importance of a careful calibration of the views.

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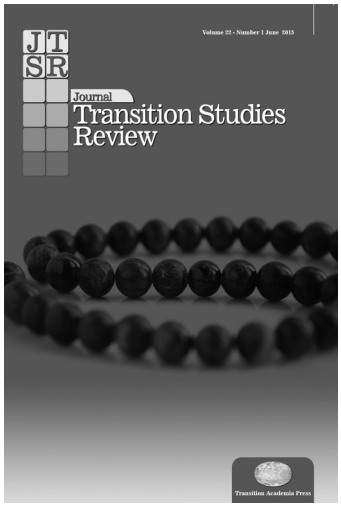

Journal Transition Studies Review
Aims and scope

Transition Studies Research Network was founded in 2002 as CEEUN-Central Eastern European University Cooperation, with the aim to connect a group of experts and university faculty in a program of cooperation devoted to research programs and specialized international postgraduate and doctoral courses. The Network has grown fast and soon after the scientific "voice" was established with the Journal Transition Studies Review, published initially by the CEEUN, then by Egea - Bocconi University Press, and finally by Springer Wien-New York.

At the beginning, JTSR was focusing on transition in Central and Southeast Europe, interpreting CEEUN purely as a European network. Soon afterwards, the EU enlargement was achieved extending the aims and scope to differentiated forms of partnership with Russia, Ukraine, Caucasus, the Black Sea and Caspian Seas, Mediterranean regions and Near East. Today this approach has dramatically changed following a serious violation of the international laws and agreements by the Russian backed insurgency and later invasion of Crimea and Eastern Ukraine. Today we are facing the most severe crisis of security and confidence between European Union countries and Russia since the Second World War and the reunification of Germany. The future is unpredictable and certainly nothing will return to be as before in the relations with Russia.

CEEUN was launched in Vienna and its first meeting took place at the Institution that was founded by Friedrich August von Hayek and Ludwig von Mises, two great

thinkers and economists: the Austrian Institute for Economic Research. Now the scenario is completely different. From 2005 on, a worldwide regional approach looking to Asia, Latin America, Eurasia and Great Middle East has been implemented. TSN-Transition Studies Research Network has inherited from the previous CEEUN the "aims and scope" which were recently integrated. In the last ten years Transition Studies Research Network has progressively involved more than 400 internationally well known members and 95 university departments, institutes and research centers and is engaged in many areas and programs.

The scientific interests and fields covered are: Europe and the World, future approach to EU enlargement, global governance economic, financial and policy framework and impact, where the focus would be mainly on growth theories, innovation and human capital, cultural and intellectual heritage, main advanced industrial sectors technologies, investments, international affairs, foreign policy choices and security, monetary policy and main currency areas, banking and insurance, development and area studies, social policies, environment and climate, culture and society, juridical and law studies, regional approach to global governance, peculiarities and critical challenges.

The future transition to an open economy and institutional reforms, political and strategic issues and challenges, governance, European, Mediterranean, Asia-Pacific, Middle Eastern, Latin America and Africa perspectives are key topics of this high ranking journal.

Transatlantic and Asia-Pacific relations, security and international order represent, together with applied regional studies, another cornerstone of the Network's activity and of Transition Studies Review's contents as well as of three other Journals covering specific aspects and regions: the Journal of Global Policy and Governance; the Journal of East Asia in World Affairs, in cooperation with Asian universities and the Journal of Welfare Policy and Management at Udine University. The Network is deeply committed to a wide range of transition issues related to quantitative modeling and tools to analyzing and researching economic, financial, strategic studies, social, cultural, environmental, juridical main issues.

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