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Cédric Durand. How transition led to internationalization?: Lessons from foreign acquisitions of post-soviet metallurgical corporations. 2006. hal-00154384

HAL Id: hal-00154384

<https://hal.science/hal-00154384>

Preprint submitted on 13 Jun 2007

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How transition led to internationalization?
Lessons from foreign acquisitions of post-soviet metallurgical corporations

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JEL codes: F23, F15, L1, L2, L61, P23, O 19

Key words: transnational corporations – Foreign direct investment - Metallurgy - Russia

Introduction

The merger process between Arcelor and Severstal initiated in may 2006 is revealing the major role that Russian metallurgists are able to play on a world scale. If this merger is confirmed, Severstal president Alexei Mordashov who puts 89 % of his group and 1, 25 billion euros on the table will become the main shareholder of the new leader with about one third of the capital of the company. That event is a spectacular illustration of the rise of the Russian metallurgy on the global scene.

Since 2002 Russian metallurgical firms have been investing abroad. Taking advantage of the very positive economic climate in the sector, they settle in peripheral as well as in core countries of the world economy. Russia has upgraded from the 50th to the 24th rank between 1995 and 2004 as far as FDI outward flow is concerned [CNUCED, 2005]. Although the Russian FDI stock is still quite limited if compared to other countries, it is five times greater in 2004 than it was in 2000 [BCR, 2005]. The emergence of Russian transnational corporations is a new step in the post-soviet transformation: after the break-up of the old system and a chaotic moment of reorganization, some firms are now building global strategies of growth. And Russian metallurgists are the most involved in this process just after the oil and gas sector [VAHTA and LIUTHO, 2004].

Russia ranks as the world's third biggest producer of aluminium and Norilsk is the first nickel producer. Russia is also the fourth largest steel producer in the world and it holds the second position in the world steel exports. During the past few years, Russian metallurgical companies have been investing abroad more than 4 billion USD, significantly strengthening their international positions. Although that growth has mainly been fuelled by high world market prices for these commodities, that shift reflects an increasing interest towards more demanding internationalization modes than exports. Their acquire assets in peripheral as well as in core countries of the world economy.

Such an outcome of the transition process had not been considered in early transition economics. On the one hand, integration into the world economy was mainly examined as importation of the world price matrix and FDI inflows but not in terms of expansion abroad or exports. On the other hand, most of the authors have underlined that the heavy-industry sector was overdeveloped in the soviet economy. Some pointed that, considering world prices the production of such industries sometimes wasn't worth its inputs. Therefore, one of the aim of the transition was to redistribute resources and workforce from that sector to consumer goods and services sectors. On the contrary, one of the central result of the post soviet transformation is that heavy-industry sector has increased its relative weight in the economy. Moreover, gas and oil enterprises as well as metallurgical firms are leading actors of the integration of Russia into the world economy. It's also interesting to note that it contradicts the restructuration scheme that supposed that « *the speediest way to improve the performance of the industrial sector is to foster conditions that promote the formation of new private firms* » [WOO, 1997, p. 323]. Indeed, the natural resource-based conglomerates which are the main contributors to Russian growth are typically inherited from soviet times.

This paper addresses that paradoxical outcome of the transition process while giving evidence of the trajectory of the metallurgical branch. However, it also focuses on another point. Why do firms internationalize? The scope of the Russian metallurgical shift, its simultaneity and its quickness represent a great opportunity to discuss different hypotheses suggested by the literature and to try to learn from the transition process on that point.

This article puts forward an institutional and systemic perspective on multinational corporations. We focus on three kinds of determinants of the internationalization: dynamics of growth based on the resources of the firm, an advantage seeking behavior in order to improve the firm's position in front of its international competitors and a complex interaction vis-a-vis the Russian political power.

The central point being the birth of transnational corporations, we focus on firms. Collecting

information from the corporations and from specialized publications, we have compiled data about fifty metallurgists' foreign operations. Sector's data rely mainly on information published by professional associations and by the London Metal Exchange.

The first section presents the context of the transnationalisation: the reasons of the growing weight of exports during the first years of the transformation and the main figures of the sector's evolution. The second section describes the geographical and strategic orientation of the recent wave of foreign investments. The third briefly discusses some theoretical aspects developed in the literature and makes clear our institutional and systemic framework of analysis. Finally, the fourth section explains how relevant the three kinds of determinants of that internationalization are.

1. A favourable context for the international development of metallurgical firms

The birth of Russian metallurgical multinationals is rooted in two main phenomena. Firstly exports have been a leading factor of the reorganization of this sector since the nineties. Secondly, a very favourable world conjuncture has widely increased their financing capacities since 2003.

1.1. The role of exports in the reorganization of the metallurgy in the nineties

The first stage of the internationalization of metallurgical firms is contemporaneous to the beginning of the post-soviet transformation.

The transition shock results in a sharp drop in internal demand, the rise of atypical forms of payment and an acute level of uncertainty. These elements constitute strong incentives for the development of exports allowed by the trade liberalization [DURAND, 2003]. Between 1992 and 1997, exports grew from 20 to 80 % of the national production of non-ferrous metals and from 3 to 65 % of ferrous metals [EKSPERT, 1998 ; BUDANOV, 1998]. That change is accompanied by a specialization on basic productions. Thanks to that the metallurgy sector limits the depression of the activity. At the same time, predatory behaviors based on the control of trading structures enable a reduced group of persons to accumulate considerable resources which will partly be used to take control of metallurgical firms.

Exports are thus the root of the increasing weight of the metallurgy in the Russian economy. After the 1998 financial crisis, the metallurgical firms also benefited from a wealth-effect related to the devaluation. This momentum also marks the beginning of the stabilization of a capitalist oligarchy which controls the branch [DURAND, 2004].

This post-1998 period is characterized by a spectacular vertical and horizontal consolidation : the creation of Rusal and Sual aluminium groups ; the constitution of Evraz-Holding and the reinforcement of industrial groups around ferrous metallurgical combinats of Magnitogorsk (MMK), Novolipetsk (NLMK) and Severstal. These groups integrate chains of exports : they create direct commercial representations abroad and take participations in port infrastructures [RUSSIA-INTELLIGENCE, 2005 ; companies websites). Metallurgical groups also intend to secure their inputs while acquiring iron mines (Severstal, NLMK) or alumina's plants and bauxite mines (SUAL, Rusal). Some of them take an option on downstream industries through transforming plants and automotive firms (Rusal ; Severstal).

1.2. 2003-2005: a golden conjuncture

Benefiting from a strong growth of demand on internal and international markets and from higher prices, metallurgical firms have obtained exceptional cash-flows since 2003.

A strong dynamics on world markets

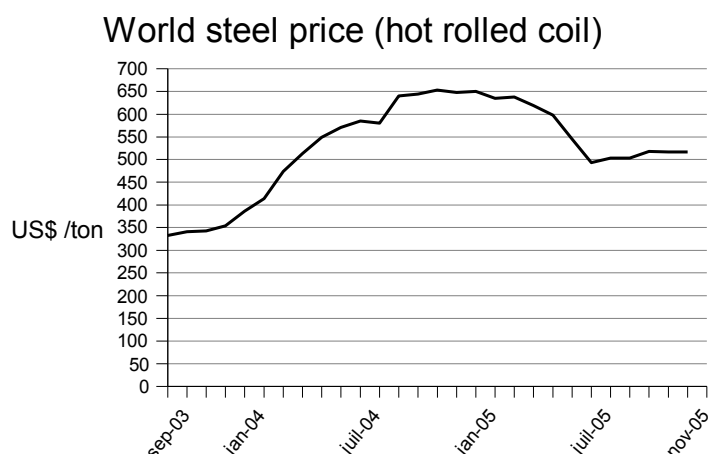
Since 2003, situation on steel world markets has been extremely favourable as well as on aluminium and nickel markets.

As far as the iron and steel industry is concerned, prices have dramatically increased between autumn 2003 and 2004, contrasting with 20 years of stability [INTERNATIONAL IRON AND STEEL INSTITUTE, 2005a], although they get a little bit lower in 2005 (graph 1). This dramatic evolution is

only partly explained by the weakening of the US dollar. Growing demand, mainly from China, higher transportation and energy costs, strain on iron ore, almost saturated production capacities are the main factors explaining that rise.

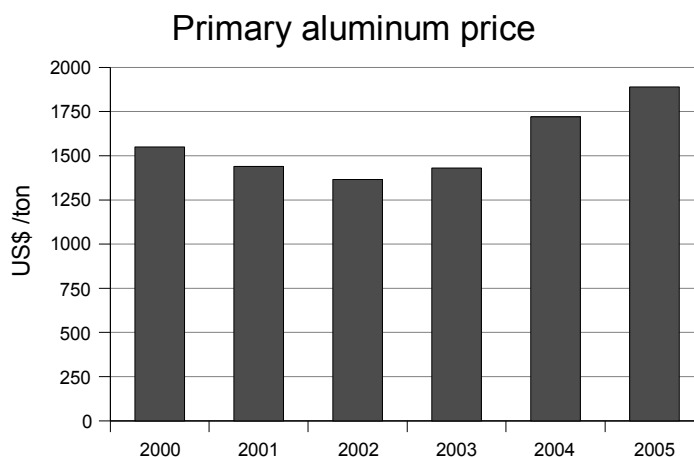
The Chinese issue is crucial on the world steel market. China represents now one third of world consumption instead of 17 % in 2000 and most of the world growing demand is linked to its own growth [INTERNATIONAL IRON AND STEEL INSTITUTE, 2005 b]. Nonetheless, because of Chinese building of new capacities, strains on steel market and related rise of prices are supposed to slacken in forthcoming years.

graph 1. Evolution of world steel price (hot rolled coil ; sept 2003-nov 2005 ; www.meps.co.uk)



As far as aluminium is concerned, the rise was less spectacular but still important in 2003 and 2004, persistent in 2005 (graph 2) and even accelerated in the first quarter of 2006. That rise can mostly be explained by the same factors as for the steel products. Although China's role is decisive too, it is quite different here: China has until now an excess production but will not be able to maintain self-sufficiency in forthcoming years because of its lack of alumina sources and its incapacity to increase its external supply [EVANS, 2005]. Strains on alumina are then expected to raise prices in the future.

graph 2. Evolution of primary aluminum price (2000-2005 / LME 3 mois)



Nickel price has mostly known the same trend as steel [LME, 2005]. Indeed, 2/3 of nickel demand proceed from stainless steel production.

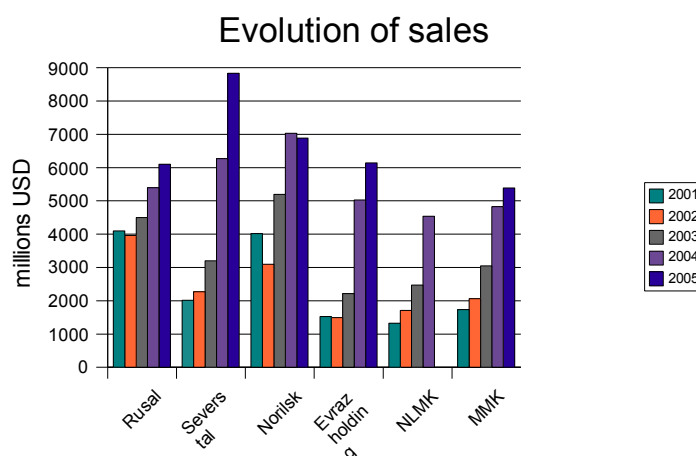
The evolution of the prices is contemporaneous to many mergers. Recently, the aluminium world leader, Alcan, which had notably bought Algroup, Flexpac and Pechiney. Alcoa, Norsk Hydro and Chalco are also involved in a process of strong external growth. Although, consolidation has been less important as far as iron and steel industry is concerned, there is also such a move: the takeover bid of Mittal on Arcelor, the eventual merger Arcelor-Severstal and many other less important operations of leading firms that aim to be active worldwide.

Exceptional cash-flows for the metallurgists and financing capacities

As the share of exports is still very important in metallurgists' sales – from 45 to 80 % depending on the firms, the enterprises have fully benefited from the world conjuncture. Moreover, the internal market has also been expanding quickly.

Thus, we observe a spectacular rise in the sales of the main enterprises (graph 3). Expressed in dollars, the less impressive increase is that of Rusal - however it is of 50 % between 2001 and 2005 - and that of Norilsk Nickel with 75 %. As far as iron and steel producers are concerned the rise is skyrocketing : about 200 % for NLMK, MMK and Evraz during the same period ! Although the weakening of the dollar is an important factor, this evolution is highly significant.

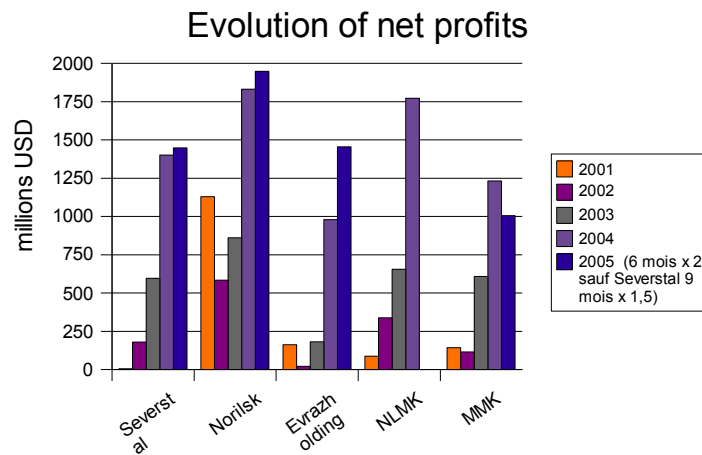
graph 3. Evolution of main metallurgical firms' sales since 2001 (published results)¹



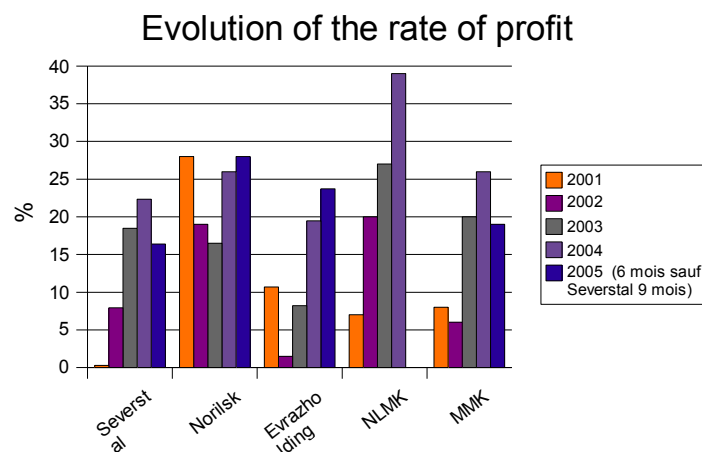
With this exceptional increase of whole sales Russian metallurgists, as well as their international counterparts, have obtained financial results that are not less impressive. We cannot present the results of the two aluminum firms – Rusal and Sual – since they do not publish them. But data from other main metallurgical enterprises show that all of them have net profits between 1000 and 1800 millions of dollars in 2004 (graph 4). The rise is especially spectacular for the iron and steel industry that never had results of this kind. Profits rates are also extremely strong, up-to 39 % for NLMK (graph 5).

Changes in world markets may not completely explain these results: firms have modernized their production tool, increased labor productivity and improve their production diversity and quality conditions. But these more fundamental changes can not fully explain such exceptional results.

graph 4. Evolution of main metallurgical firms' profits since 2001 (iron and steel industry and nickel – published results)



graph 5. Evolution of main metallurgical firms' rate of profit since 2001 (iron and steel industry and nickel – published results)



Their new access to world financial markets adds to this inflow of money to provide metallurgical firms with high financing capacities. Russian metallurgical firms are fairly perceived as good liquidities holders and may now lend to world financial markets at lower and lower rates. Since 2003, firms such as Evrazholding, Severstal and NLMK have emitted bonds. But Rusal had preferred until now to finance its development by banking loans.

The rise of exports during the nineties had allowed metallurgical firms to limit their production crisis, given some middle men resources to get control over the branch and participate in its consolidation. This international connection of the branch is also the main reason of the accumulation of liquidity since 2003 while benefiting from the very favourable conjuncture on world markets. This increase of their financing capacities is clearly one factor that helps them invest abroad.

But world markets are not only an opportunity to grow for Russian firms. They have at the same time grown vulnerable and are now affected by multidimensional competitive pressure : Russian metallurgist must now be able to face world competitors on specific grounds such as price, quality and access to strategic inputs. This exposure to world competition constitutes a set of constraints that lead the geographical as well as strategic orientation of their foreign investments.

2. Geographical and strategic orientations of metallurgists' foreign investments

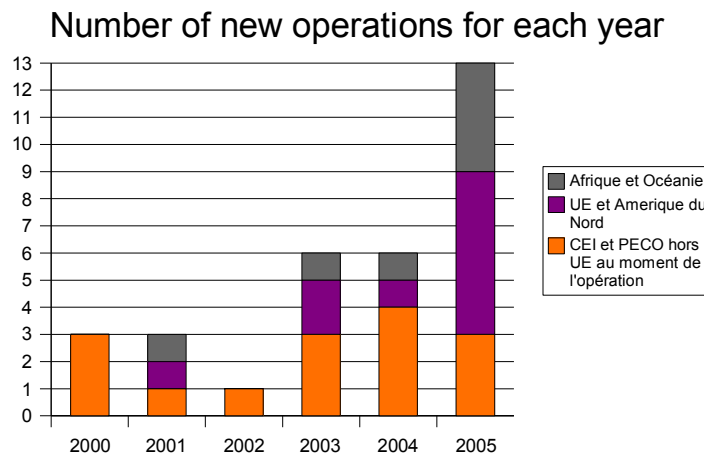
What is the orientation of international investments of metallurgical firms ? First we will present a rapid panorama of these investments ; second, we will propose an analysis of their underlying strategies.

2.1. Panorama of metallurgical foreign investments since 2000

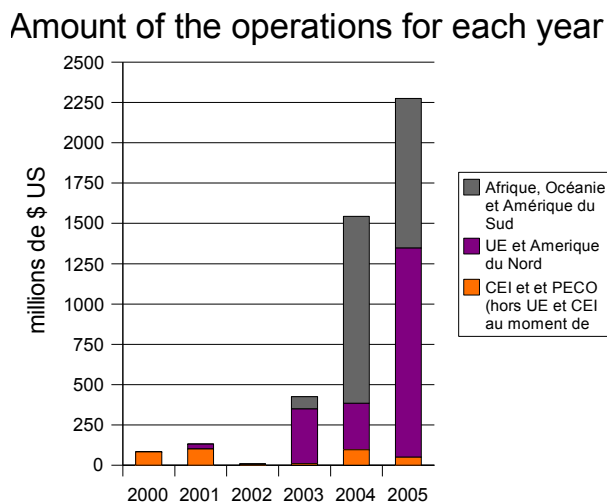
Based on information published by the press and by companies, we have compiled data from foreign productive investments (i.e. not considering investments in trade companies) that are presented here (graph 6 and 7). On this basis we are able to make a double statement. First, the productive internationalization of Russian metallurgy didn't exist during the nineties and has dramatically accelerated since 2000. Second, foreign operations of Russian metallurgists are not restrained to the central European or the CIS countries ; they concern core markets of the world economy (North America and European Union) as well as southern countries (Latin America, Africa and Oceania) where important mineral deposits are located.

Such a distribution necessitates a short comment concerning the absence of investments in Asia (although Rusal plans to invest in India and MMK in Pakistan). These phenomena may partly be related to the fact that acquisition in Europe and in the US mainly implies the buying of loss-making firms. Yet, such opportunities typically do not exist in regions that are rapidly growing.

Graph 6. Number of productive investments realized by Russian metallurgists abroad



Graph 7. Amount of productive investments realized by Russian metallurgists abroad (only acquisitions ; without taking further investment into account)

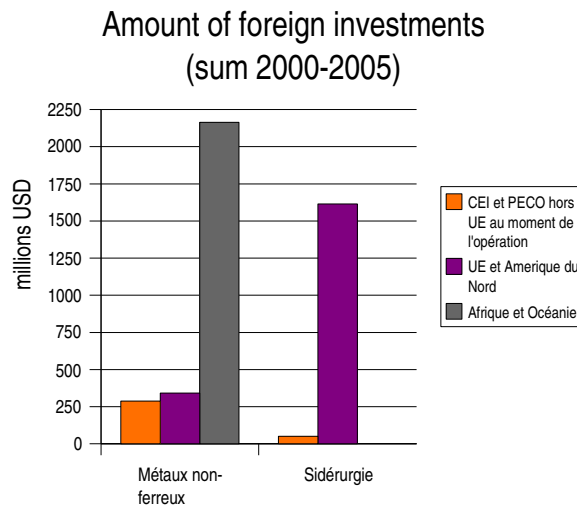


We have identified six firms from non ferrous metallurgy and 8 from ferrous metallurgy that possess productive assets abroad. However, only four of them (Rusal, Norilsk Nickel, Severstal and Evraz) possess assets in different regions and for an amount of several hundred million dollars. At this very moment, MMK and NLMK are still not very internationalized but have planned some operations that suggest that they also have an internationally-oriented strategy of growth.

2.2. Investing strategies of metallurgists

The international direct investment flows display two main kinds of strategies (graph 8). First, non-ferrous metallurgical groups are seeking access to mineral inputs and energy mainly in peripheral countries of the world economy. Second, enterprises of the ferrous metallurgy are mainly seeking access to core markets in Western Europe and North America. These two paths of international development are grounded on very different industry dynamics. While the world steel production had only grown by 14 % in volume between 2000 and 2004 [INTERNATIONAL IRON AND STEEL INSTITUTE, 2005c], aluminum production had grown by 63 % [ULIANOV, 2005]. Moreover, their market structure is quite different as aluminum industry is much more consolidated than ferrous metallurgy.

graph 8. Destination of foreign productive investment of ferrous and non-ferrous metallurgical firms



Inputs seeking for non ferrous metallurgical firms

Rusal's brief history is already rich in mergers. This process of external growth began in Russia with Sibirskij Aluminij at the end of the nineties and is now mainly international. At the present time, Rusal is the third world primary aluminum producer and pretends to become the leader ten years from now. Its investments aim mainly at securing inputs imports chains, which is coherent with the competition regime in this industry which is organized around access to bauxite mines in tropical regions.

Main competitive advantage of Rusal is its access to cheap and abundant hydro-power in Siberia. Its present investments also aim to comfort this advantage while increasing its power capacities in Russia but also in Tadjikistan and in Kazakhstan. If you look at the whole spectrum of Rusal's international investments, it clearly appears that the firm strategy is oriented upstream, to energy and mineral resources. Although Sual doesn't have the same weakness as Rusal – truly they are quite complementary and Rusal has already expressed its interest for a merger - concerning its inputs chains, this enterprise also aims at controlling new sources of alumina. As far as Norilsk is concerned, the same logic also operates with investments in order to control gold, platinum and palladium sources.

Investments of the leader of the titanium industry VSMPO-Avisma in the US are the only ones in the non-ferrous metallurgy that seem to be mainly oriented by a market seeking strategy.

Market seeking strategy for the steel industry

Access to inputs is less problematic for most of the enterprises of the steel industry as most of them already possess some participation in Iron ore mines and stable coal supply chains. The main motive of internationalization is thus markets access. Indeed, contrary to aluminum industry, steel industry is expanding slowly, with mostly stable prices in the long run. This industry had already known deep restructuring and the main strategic problem remains to stabilize access to markets on the medium and long run. Moreover, Russian metallurgists have already been affected by antidumping and quota procedures. Acquiring firms in Europe and the US is thus a solution for metallurgists to stabilize its exports markets.

At the same time, this kind of strategy allows firms to increase their competences : acquiring firms or investing in J-V nearby leading world clients favours access to advanced productive knowledge.

Internationalization of metallurgical firms is a massive but heterogeneous phenomenon. We observe

two main kinds of strategies: inputs seeking in the non-ferrous metallurgy and market seeking in the ferrous metallurgy. That way some of the Russian firms are truly entering world competition and are building a world wide development strategy. However, these firms are not strictly global multinationals [ANDREFF, 2003]. Indeed, if they have a global vision of markets, they are still strongly embedded in territories ; their dependency on mineral materials and the high cost of the productive apparatus imply a very rigid organization of supply chains.

3. An institutional and systemic approach of the firms internationalization

Some works have made an assessment of the theoretical discussion concerning multinational firms [ANDREFF, 2003 ; PITELIS and SUGDEN, 2000] and we have focused elsewhere on the impact of Foreign Direct Investment in developing countries [DURAND, 2005a et 2006]. We want here to propose some theoretical elements to analyze the motives of firms internationalization before confronting them to the case of Russian metallurgical firms.

First, we will shortly present three kinds of explanation of the internationalization of firms: the theory of the growth of the firm, demand led explanations and an analysis focusing on the strategies of the firms vis-à-vis their competitors. After that we will expose our general framework.

3.1. A resource-based growth of the firm

The theory of the growth of the firm [PENROSE, 1959] considers the enterprise as a center of resources that have to grow or to die. These resources may be financial but are mainly, in the mind of Penrose, managerial resources that may be connected to the evolutionist concept of *collective knowledge* [NELSON and WINTER, 1982]. These resources participate in a *specific advantage* made of intangible assets [HORTSMAN and MARKUSEN, 1989] or related to localization (geographical situation and institutional context). This *specific advantage* orientates the growth of the firm.

Depending on its resources and of opportunities, the enterprise has got three options to grow [WOLF, 1977; KAY, 2000]: 1/ growing in its own business and in its own country ; 2/ diversify its activities while staying in its own country ; 3/ Diversify its activities geographically speaking while exporting or expanding its business abroad.

The internationalization option and especially that of creating a multinational corporation seems to be the hardest. Indeed, many different factors make more complicated and costlier to operate abroad. Two main kinds of explanations are proposed, focusing on the demand side or on the global competitive process.

3.2. Demand-led explanations

Theories of imperialism have first explained the expansion of big enterprises abroad by excess of capital in advanced capitalist countries and weakness of aggregate demand [LENIN, 1916 ; LUXEMBURG, 1913; HILFERDING, 1910].

That kind of analysis has had a quite strong empirical validity to explain internationalization of capital before WWI from developed to developing countries. But they were not able to explain transatlantic flows of investment after WWII nor the present situation in which the first economic nation is a net importer of capital.

With the concept of *all weather company*, Pitelis has suggested a new macroeconomic approach based on the demand side. He indicates the will of companies to protect themselves against national economic cycles while diversifying geographically [PITELIS, 2000]. This argument allows to enlarge the relevance of demand-led explanations but may not explain why internationalization implies foreign investment and not just exports. Within such a process, smallest and less globalized firms have to support the consequences of insufficient demand.

3.3. In search of advantages to face global competitors

The literature examines mainly three kind of internationalization strategies that aim to improve the position of firms facing global competition : market power seeking strategy, techno-competitive advantage strategy and efficiency gains seeking strategy

Market power seeking

Demand led explanations have to be related to market power analysis. These works show a trend to the elimination of conflict between main firms resulting of multinational growth and behavior [HYMER, 1976; CAVES, 1971; SWEEZY and MAGDOFF, 1974 ; PALLOIX, 1975 ; COWLING and SUGDEN, 1987 ; GRAHAM, 1978]. But it is not necessary to postulate the elimination of competition to give an account of market power seeking strategies. Within the global value chain analysis [GEREFFI and KORZENIEWICZ, 1994 ; GEREFFI and KAPLINSKY, 2001 ; GEREFFI, HUMPHREY and STURGEON, 2005], a growing market power as a seller or as a buyer allows the firm to increase its negotiation power vis-à-vis its suppliers or its clients and improve its financial operations. Indeed, the degree of concentration of a node of a chain is strongly correlated to the share of global chain's value that is realized within this node [HOPKINS and WALLERSTEIN, 1994].

Techno-competitive advantages seeking

Porter has shown that for some industries global integration generates competitive advantage. [PORTER, 1986, 1990]. Focusing on innovation seems to be highly relevant because of the decisive role of technological advantages in global competition [FREEMAN, 1991; MANDEL, 1997]. Yet, the literature suggests that the confrontation of the domestic way of producing and innovating with new markets conditions favours innovation [CANTWELL, 1995; DUNNING and WYMBBS, 1999]. Innovation seeking strategies contribute to increase competitive pressure and tend to break up national oligopolistic collusion [GRAHAM, 1985; CANTWELL, 1989].

Efficiency-seeking strategy

The efficiency gains seeking strategy focuses mainly on competitive gains that may be obtained by lowering labour costs and taxation. It can be interpreted through the marxist microeconomic perspective called *divide and rule* that focus on distribution [MARGLIN, 1974; BOWLES, 1985]. Mobilized to explain transnationalization of corporations, [PEOPLES and SUGDEN, 2000] this approach is congruent with an analysis of the neoliberal regime as a multidimensional effort to increase profit rate [LOCKE, KOCHAN and PIORE, 1995]. Peoples et Sugden show that enterprises can use the low mobility of labour in order to obtain lower wages: indeed the geographical and cultural division of the labour force lowers the workers mobilization capacities and, at the same time, their bargaining power.

Internationalization also allows firms to increase their bargaining power vis-à-vis local communities and their national state [CROTTY, EPSTEIN and KELLY, 1998]. Corporations can use different kinds of threat related to its control over productive chains in order to obtain some evolution concerning social, ecological, fiscal and monetary rules or gain some support from the state for its international development. Firms sometimes blackmail local authorities to obtain advantages when they look for a place to locate their activities. They also build strategies of fiscal optimization while manipulating internal prices and modifying capitalization of their subsidiaries [SAINT-ETIENNE, LE CACHEUX and al. 2005].

Thus, internationalization enables firms to obtain efficiency gains vis-à-vis labour and public entities through the partial emancipation of social and political constraints that are linked to the territorialization [ANDREFF, 1996]. It's worth noting that the reasoning related to the *All weather company* concept may be also used here to underline investments strategies diversifying political and social risks through internationalization.

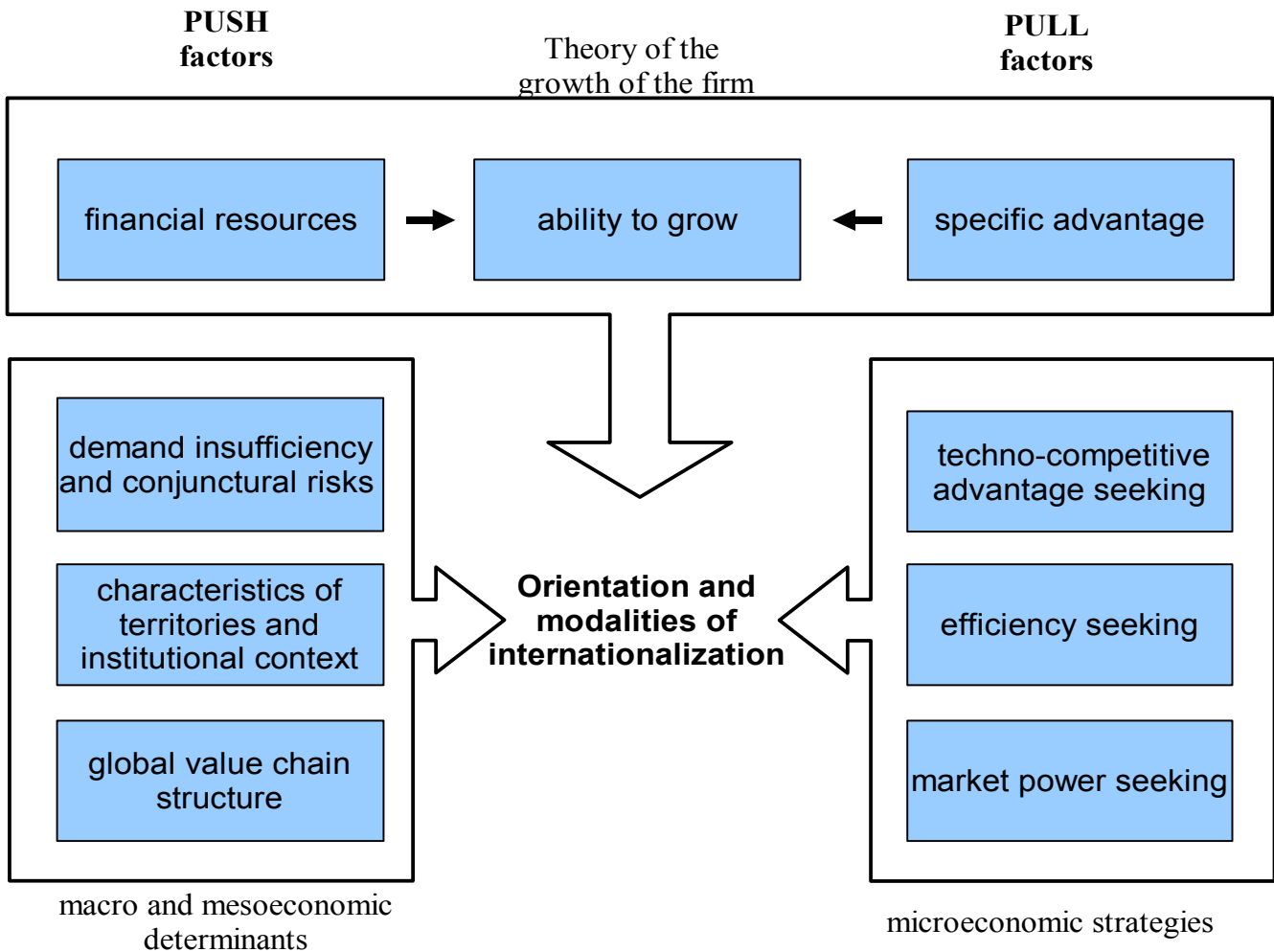
3.4. An institutional and systemic approach

Of course it is not our aim to present here a theoretically unified approach. Multinational corporations are such a very specific and very complex object of investigation that the most influential framework has been called the *eclectic paradigm* [DUNNING, 1993 and 2000]. This paradigm mobilizes different kinds of theoretical tools and suggests that the modalities and importance of firms internationalization is determined by three forces: the specific advantage of the firm (*Ownership*), the advantage to localize abroad (L) and the advantage to internalize the transactions within the firm (I). This approach has been completed by the investment development path perspective that links the dynamic of foreign investment with the economic development of nations [DUNNING and NAROLA, 1998]. In spite of its new element the eclectic approach is mainly microeconomic and so large that it cannot not establish the link between firms internationalization and the evolution of capitalism toward a world economic system [MICHALET, 1998 and 2004; CHESNAIS, 1997 ; PORTER, 1990].

We propose here an institutional and systemic perspective. It aims to take into account macro and meso institutional characteristics of the neoliberal regime and micro determinants such as techno-competitive advantage seeking, market power seeking and efficiency seeking strategies. We can synthesized our conceptual framework like this (scheme 1).

Internationalization results from firms' capacities to grow because of the availability of financial or managerial resources. This ability to grow may entail international development. The decision to internationalize, the geographical orientation of the internationalization and its modalities result from macro and mesoeconomic push factors and from microeconomic pull factors. Meso and macroeconomic determinants are demand insufficiency, risks related to economic cycles, global institutional contexts, geographical and institutional characteristics of territories as well as global value chains structures and the competitive regime of the segment concerned. Microeconomic strategies that lead firm to internationalize are efficiency seeking, market power seeking and techno-competitive advantage seeking.

scheme 1. Articulation of factors that explain firms internationalization



4. Determinants of the internationalization of Russian metallurgical firms during the transition process

On the basis of that institutional and systemic framework, we have to explain the role played by three kinds of factors to explain the internationalization of Russian metallurgical firms : the tightness of local demand and availability of resources (financial, managerial) ; the pursuit of competitive advantage especially in order to improve the position of the firms within global value chains ; finally, a complex articulation with the Russian state that responds to efficiency seeking strategies and aims to gain more autonomy for the oligarchy in a context of strong interdependence between metallurgical firms and the state.

4.1. Tightness of local demand and availability of financial resources

Our data confirms the relevance of the resource-based theory of the growth of the firm and the role of aggregate demand.

Indeed, the development of exports in the early phase of the transition is rooted into the specific conditions of the transformation. The disorganization of economic relationships and others factors (demonetization, liquidity crunch..) that led to the sharp reduction of internal demand are decisive to explain the preference for exports that we observed at that very moment. Exports enable firms to maintain their activities and limit both the destruction of physical and managerial productive capacities inherited from soviet times and potential social troubles related to the huge level of unemployment. In accordance with the *all weather company* theory, firms tried to diversify destination of exports in order to diversify the risks.

After a process of internal consolidation, development of foreign direct investment relies on availability of resources, especially financial resources accumulated thanks to an exceptional conjuncture. Competencies of the metallurgical firms are better used abroad than by diversifying the activities of the corporations in Russia. It's worth noting that we observe a path dependency in the international growth of some firms. For example, Rusal has maintained and developed productive chains inherited from soviet time between Russian and other CIS assets. It also acquired some bauxite mines in Guinea that already supplied soviet smelters.

4.2. In search for a better position within global value chains

Metallurgists consider that improving their position within global value chains is inescapable in order to face world competition. Such an objective means that that they have to secure their supplies, protect their outlets for trade and improve transactional conditions. At the same time some operations also aim to gain techno-competitive advantages from joint-ventures or from proximity with leading clients.

In accordance with transaction costs theory, when asset specificity leads to captive relationships, firms choose to internalize transactions [COASE, 1937 ; WILLIAMSON, 1985 ; PITELIS, 1993 ; HENNART, 2000]. That way, foreign acquisitions aim to transform the governance structure of value chains [HUMPHREY and SCHMITZ, 2001 ; GEREFFI, HUMPHREY and STURGEON, 2005]. Investments in bauxite mines or alumina plants as well as in Russian transportation infrastructure and commercial representations abroad are symptomatic of such a logic. In return, investments in the European Union and in North America are more related to structural market failures analyzed in early studies on internalization within multinational corporations [HYMER, 1976; CAVES 1971] in order to reduce adverse implications of commercial restriction such as anti dumping procedures and quotas.

Market power seeking is an explicit strategy of metallurgists. For example, Evrazholding underlines in its strategical orientations the benefits that result from its leading position in terms of negotiation power vis-à-vis its suppliers. People from Severstal are even more direct: (Annual report, 2003, p.33):

« One of Severstal's key strategic aims is to become a leading participant in the global steel market. To achieve this, Severstal intends to actively participate in consolidation, both in Russia and internationally. Consolidation in the world steel industry is expected to change the current balance, whereby suppliers of raw materials (such as coal and iron ore) and the largest consumers of steel products (such as the automotive industry), are able to obtain higher margins for their products than are the steel producers, as their respective industry are substantially more concentrated than the steel industry.»

Metallurgists experienced another way of improving their position while internationalizing : to acquire techno-competitive competencies. In order to increase their prices they have to diversify and specialize their products. Such an improvement implies a better understanding of markets and clients' expectations that internationalization helps to obtain. This logic can be illustrated by investments of

Severstal in the United States nearby automotive plants. Rusal partnership with main aluminum producers in the alumina plants in Queensland is also a mode of access to the newest technological know-how concerning alumina. However, Russian firms have other ways to incorporate new technologies and competencies by modernizing their production apparatus, training, J-V in Russia (Severstal-Arcelor) or recruiting occidental top-managers (Rusal, Severstal).

4.3. A complex articulation between firms' strategies and political leadership

The third kind of determinant is the articulation between state politics and firms' strategies. The efficiency seeking through a *divide and rule* kind of strategy vis-à-vis workers is not really relevant in this sector because of the strong territorial embeddedness of metallurgy that limits capital mobility. In return, internationalized firms may develop such a strategy against the states, for example, while optimizing tax payment. Basically, they may use such a threat in order to increase their bargaining power and obtain different kinds of support concerning their activity or their international expansion. For example, Alexander Bulygin, Rusal's CEO, clarifies the role of internationalized firm concerning the distribution of value added throughout its international assets [VEDOMOSTI, 30th June 2005]:

« We operate on five continents where we have trade representative offices and production capacities. The government of the countries where we operate also have expectations on tax deductions. Therefore, we cannot say that the whole profit, not taking into account interests of these countries, could be consolidated in Russia in five years. Then we would just lose our capacities abroad ».

Implicitly he shows the possibility for its firm to exert an efficiency arbitrage between different countries. The non-realization until now of a Rusal project in Venezuela is another illustration of the potential game of opposition between firms and states: the requirement of the Venezuelan government that the alumina be transformed there wasn't accepted by Rusal which wants to export alumina in order to feed its Siberian smelters.

Clearly, internationalization reinforces firms' bargaining power against the states. However, this bargaining power is not unlimited. Most multinationals appeal to their national state in order to get help to develop abroad [CHESNAIS, 1997 ; MICHALET, 2004]. It is even more important in an activity such as metallurgy where localization is a crucial issue because of the reliance on natural resources and the importance of non compressible investments. In the Russian case, numerous examples show that the articulation between business and foreign politics is vital for firms as well as for states. Thus Rusal's projects in central Asia were officially supported by the Russian government and officials participated in some ceremonies concerning the Rogunskaya hydro-power station building in Tadjikistan. According to the press, the merger proposed by top managers of Arcelor and Severstal was primarily discussed directly between president Putin and Severstal's CEO, Alexei Mordashov.

Moreover, Russian metallurgists urge political support in order to preserve social peace, particularly as far as restructuring is concerned, and to guarantee stability of property rights. The existence of a national corporatism in the Russian metallurgy [DURAND, 2004] may thus not be completely dissociated from the politico-economic logics inherent to internationalization.

The stability of property rights is still a hot issue in Russia as illustrated by the judicial conflict between the ex-owner of Yukos, Michael Khodorkovski, and the Russian state. The illegitimacy of the privatization process during the nineties [WEDEL, 1998 ; DURAND, 2005b] makes a reconsideration of these operations possible. Considering such an uncertainty, foreign investments can be seen as a solution for Russian oligarchs to protect themselves from political hazard. On the one hand, acquiring foreign assets enables them to directly protect part of their capital ; on the other hand, upstream or downstream control of the international value chain puts their Russian assets in a captive relationship that limits the relevance of an eventual expropriation.

To qualify the relationship between Metallurgists and politics as far as internationalization is concerned as « equilibrated » [VAHTA and LIUTHO, 2004] seems to be quite restrictive. Indeed, if

market motivations of internationalization are not the only ones it is not because of the problematic interventionism of the state ; there is a complex game of mutual dependency between the oligarchy and the political elite that has to be analyzed for itself.

Conclusion

The trajectory of the Russian metallurgy is clearly an unexpected result of the transition process. Instead of the reduction of the sectoral disequilibrium of the soviet growth, the heavy-industries are now the strongest pillars of the Russian economic recovery. However, the internationalization of metallurgical firms is also an indicator of the success of the transition. The fact that some Russian corporations are now able to compete on world markets and invest all over the world is a clear signal of “normalization”. The Russian post-soviet capitalism has its own specificities, but Russia's embeddedness in the global economy and its contribution to the rules of globalization is now a fact. This particular contribution of Russia to globalization is also seen as symptomatic of the emergence of multinationals from peripheral countries and seems coherent with analyses that point to the return of the old economy [MIOTTI and SACHWALD, 2006].

Throughout this article we have established the extent of the internationalization of the Russian metallurgy and the main steps of the process since the early nineties. One important feature is that the initial shift to internationalization is to be found in the degradation of the transaction conditions in the internal market and the drop in national demand during the nineties. Secondly, the highly favourable conjuncture since 2002 has played a major role, enabling metallurgists to pursue the internal process of consolidation by developing internationally. An international development that is mainly upstream or downstream oriented, depending on global value-chains specificities and responding to international competitive pressure.

The rapidity and the extent of the internationalization of the Russian metallurgy gave us an exceptional opportunity to test hypotheses concerning the determinants of internationalization. We have put forward an institutional and systemic perspective and presented three kinds of determinants of the internationalization of the Russian metallurgy : dynamics of growth based on the resources of the firm and the macroeconomic constraints, an advantage seeking behaviour in order to improve the position of the firm in front of its international competitors by acquiring market power position and/or techno-competitive advantages and a complex interaction vis-a-vis the Russian political power, made of autonomy-seeking behaviours from the part of the firms and strong interdependences.

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