SELECTION AND RANKING OF TARGET COUNTRIES IN THE INTERNATIONAL DIMENSION STONE MARKET

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Market selection

The prospecting of international target markets can be oriented by the share profile of some countries in the dimension stone industry, observing those countries' production/consumption and trade strategies. For Brazil, the priority targets are countries that import processed finished and semi-finished products (NCM 6802), preferably those where there already exists Brazilian product penetration.

Below, we present the distinction between the main existing national groupings, as to the operating profile in the stone industry market. For all effects and purposes, it is worthwhile mentioning that the commercialization/penetration capacity in the markets is as important as the companies' mining-industrial production capacity.

- **Importing countries of raw stones and exporters of processed stones.**

These countries process raw materials for supply to the domestic market and for export, such as, for example, China and Italy. These countries invariably are also large producers.

This condition has historically been led by Italy, supported by its traditional industry, by the dominion of its capital goods industry and, above all, by the control of specification and European trade channels and, later on, global ones. In 1989, Italy had a 64.3% share of the global export market of processed stones and, in 2015, this share was only 6.8%, according to Montani (2016) [1]. Italy has been losing its importance as a stone importer, as well, accounting for 2.3% of the global import market in 2015.

China is the new major player in this strategy, advancing its share of the global market in the export of special processed stones, from 3.8% in 1989 to 42.5% in 2015. Its answered for 23.3% in 2015 of the global import market, according to Montani (*op.cit.*). Its significant domestic market and vigorous incorporation of capital goods to the industry aggressively expanded its dominion of traditional and emerging markets channels.

The issues arising from this outlook are:

- How many countries in this context can inhibit expansion of entrant countries in the export of finished products?
- What is the penetration potential of countries in the context of this strategy in the domestic markets of these countries, such as Brazil?
- What is the role of estimators in the consolidation of strategies in these countries?

[1] MONTANI, Carlo. **XXVII Rapporto Marmo e Pietre nel Mondo 2016**. Aldus: Carrara, Itália, 2016. 249 p.

- **Importing countries of raw stones and processed stones**

These are countries with significant markets and high Standards of requirement for civil construction. This group was always headed by European countries, such as, for example, United Kingdom and Germany, which, nevertheless, do not have significant processing industries. More recently, Taiwan and Hong Kong have become part of this group.

The issues raised within this perspective are:

- Which countries inserted in this strategy have space for larger imports of finished products?
- What are the penetration strategies in the markets of these countries?
- What is the role of estimators in the consolidation of the strategies of these countries?

- **Importing countries of processed stones**

Countries like Japan and the US have a considerably large domestic market, but they do not operate in processing, except in the final stages of the processing chain. These countries are insignificant producers and exporters. It is worthy to mention, however, that the construction industry of these countries has great influence in the specification stage, considering the importance of large architectural and project firms and their impact in the global market. South Korea is the most recent player to become part of this group, besides Saudi Arabia and the Arab Emirates.

As questões que se colocam nesta perspectiva são: The issues raised within this perspective are:

- Which countries inserted in this strategy have space for larger imports of finished products?
- What are the penetration strategies in the markets of these countries?
- What is the role of estimators in the consolidation of the strategies of these countries?

- **Raw Stone and Semi-finished Processed Stone Exporting Countries**

Brazil, India and Turkey have always figured among the traditional exporting countries of raw stones and are intermediated in the processing stages by countries like Italy and Spain.

Three factors have contributed to the strategic re-insertion of these countries in this industry on an international level. Firstly, global market expansion and its diffusion to new countries in supply and demand, which defined new trade relations with the incorporation of non-European countries. Secondly, the diffusion of capital goods at competitive costs, which, like other industrial segments, has allowed access to new entrants in the stages of industrialization of the chains. And thirdly, the increase in maritime freight costs, occurred as of 2002-2003, has also influenced the interest in expanding the value of transported cargo, stimulating the displacement of beneficiation activities to closer location to the origin of the raw materials, which have become export platforms of finished and semi-finished products. This, in fact, occurred with Turkey, Brazil and India, which, even with a significant share of raw stones in the physical volume of their exports, would increment the share of finished and, mainly, semi-finished stones. Within this group, the indices of the raw stone share of Brazil in the total physical volume of exports have become similar to those of Italy (48%) and Spain (59%).

The factor inhibiting greater expansion of these countries in the processed products market has been the expansion of China as an importer of blocks, which, with a competitive processing industry, has attracted these countries as suppliers.

Anchored by privileged market positions, the industries located in Europe (Italy and Spain) and in Asia (especially China), have sought to reinforce these positions through final and intermediate links, always with dynamism and sustained by their final market relationships. Companies with positioning in the area of logistics and in distribution channels have captured significant revenue in the sector, limiting the mineral provinces as producers of raw stone. The advent of agglomerate compositions with resins has pointed to inter-complex ramifications to chemicals and petrochemicals, in addition to already existing articulation with the metalworking segment, has accentuated the effects of this strategy favorable to industry. Nevertheless, the mineral provinces of emerging countries have tried to run the blockade with production of processed products with higher value added. The main challenge in this model is in the market response, with more differentiated products and those with higher degree of industrialization.

The issues raised in this outlook are:

- Which emerging markets of the construction industry can become more dynamic as new entrants in this strategy?
- Did the traditional players lose position in the civil construction crisis of developed countries?
- Which organizational model of the chain is effective for a new entrant in this strategic process? What role does logistics play in this process?

- **Raw Stone Exporting Countries**

There are countries that have remained exporters of raw Stones per se, with small parcels of exports of processed Stones, such as Egypt, whose export profile has a 90% share of low value added products.

The issues raised in this outlook are:

- What countries that are a part of this strategy are in conditions to add value to their products and change the paradigm?
- What role does logistics play in this process?

With these references, one can have greater critical vision to approach the present dynamic in Brazil, as well as have parameters to evaluate the merits and developments of the paths that can be suggested, both in regard to corporate strategies, as well as public policies that can guide a new competitive positioning of the country.

Market ranking for processed stones

The ranking of priority markets for Brazilian dimension stone exports can take into account two listings of countries:

- That of the 25 main Brazilian export destinations under subheading 6802 of the TEC NESH[2] that covers prioritized commercial products (slabs and finished products) in 2015 (Chart 1);
- That of the 25 main importing countries under subheading 6802 in 2014[3] (Chart 2).

[2] Tarifa Externa Comum (TEC) **Explanatory Notes to the Harmonized System (NESH).**
[3] Latest information available is for 2014.

The countries in the first listing receive a score which is inversely proportional to their ranking. Thus, the USA, which is the main destination Brazilian exports under subheading 6802 receives the maximum score of 25 points, not taking into account the proportion of the value exported compared to the other ranked countries. At the extreme opposite, Sweden, ranked 25th, receives the minimum score of only one point.

The countries in the second listing receive the same treatment: greater imports, higher score, and vice-versa.

Adding the score received by the same country in the two listings, gives you the points that define the order of priority. Because of knowledge of the global market, some large importers under subheading 6802 were repositioned, because they do not buy – or purchase very little – from Brazil and have little chance of becoming major customers. (Chart 3), at least in the short term.

Also according to market knowledge, countries that have higher propensity to acquire slabs and/or finished products were spotlighted (see Chart 3).

As expected, the market that stands out is North America (USA, Canada and Mexico), with the US in front, constituting the main Brazilian target, both for finished products and slabs. By order of importance first the countries of Central and South America for slabs; the Middle East countries, represented by Saudi Arabia and United Arab Emirates (UAE) and Qatar, to supply works with finished products; and the listed European countries below, with addition of Turkey and a highlight for Germany, Russia, United Kingdom and Italy, also for slabs. China appears as a promising target for slabs, projecting the same for Japan and South Korea in the middle and long term.

What stands out, as was already expected, is that the North American market (USA, Canada and Mexico), with the US in front, constitutes the main Brazilian target, both for finished products, as well as for slabs. Next come countries in Central and South America, by order of importance, for slabs; Middle Eastern countries, represented by Saudi Arabia and United Arab Emirates (UAE), to meet demand for works with finished products; and listed European countries, with Turkey added and a highlight for Germany, Russia, United Kingdom and Italy, also for slabs.

With regard to the United States, the country is the main global importer of processed stones and the main destination of Brazilian exports of processed stones. In fact, Brazil is the main sole supplier of stones to the US, essentially through slabs for the so-called single family residential unit market. Thus, almost all sales from Brazil to the US are directed towards slab distributors or, more amply stated, to national and regional coverings distributors, which are retailers. Almost all of the large works market (see Figure 1), where exports also intend to take part, is served by Italians and Chinese companies, through commercial contractors (incorporators of multi-residential family, public and commercial buildings, which account for all of the covering works).

Market ranking for raw stones (blocks)

In the same manner as processed stones, the main Brazilian export destinations under NCM 2416 are shown in Chart 4, ranking 20 countries. Among the main global importers of raw stone, the 15 most important were ranked (Chart 5). From cross-referencing charts 4 and 5, Chart 6 is presented, ranking the 25 markets considered priority for commercial promotion of products classified under NCM

2516, which includes granite blocks and silicate stones in general. This proposition can also be adopted for products under NCMs 2515 (carbonate stone blocks) and 2506 (solid quartzite blocks).

China, Italy and Taiwan lead the ranking, followed by Spain, France and Poland. Thus, as happens with the US in processed stones, China is far ahead of the other Brazilian raw stone export destinations. Besides the import export destination of granite blocks and silicate stone in general, Italy stands out as the main purchaser of Brazilian marble blocks.

Complementarily, 16 out of the 25 main potential markets for Brazilian blocks are also promising for granite slabs and silicate stones in general. Of these 16 markets, shown in Chart 6, at least two (USA and Canada) are the highlights for finished products.

Chart 1 - Main Brazilian Export Destinations of Dimension Stones in 2016 under NCM 6802 (by decreasing order of revenue)

Ranking	Country	Revenue US$ million	Score
1	USA	702,4	25
2	Mexico	31,3	24
3	Canada	30,0	23
4	China	10,7	22
5	Colombia	8,0	21
6	UAE	7,2	20
7	Argentina	6,3	19
8	Italy	5,8	18
9	Spain	5,2	17
10	Germany	4,4	16
11	Iran	2,8	15
12	Ecuador	2,7	14
13	United Kingdom	2,7	13
14	Japan	2,1	12
15	Costa Rica	1,9	11
16	Dominican Rep.	1,9	10
17	Peru	1,8	9
18	Russia	1,6	8
19	Vietnam	1,5	7
20	Chile	1,4	6
21	Sweden	1,4	5
22	Turkey	1,4	4
23	Venezuela	1,4	3
24	South Korea	1,4	2
25	Israel	1,3	1

Chart 2 - Main Global Importers of Dimension Stones in 2015 under NCM 6802 (by decreasing order of physical volume)

Ranking	Country	Weight (1000 t)	Score
1	USA	3.829	25
2	South Korea	2.190	24
3	Saudi Arabia	1.554	23
4	Canada	1.245	22
5	Germany	754	21
6	UAE	750	20
7	Japan	606	19
8	Katar	485	18
9	France	407	17
10	Belgium	405	16
11	Mexico	343	15
12	Netherlands	279	14
13	Taiwan	274	13
14	Australia	228	12
15	Russia	222	11
16	Poland	216	10
17	Turkey	201	9
18	United Kingdom	200	8
19	Italy	192	7
20	Switzerland	190	6
21	India	184	5
22	Jordan	164	4
23	Austria	160	3
24	Iran	152	2
25	Singapore	139	1

Chart 3 – Ranking of Markets for Brazilian Exports of Dimension Stones under NCM 6802

3a – Primary Ranking		
Ranking	País	Total Score
1	USA	50
2	Canada	45
3	UAE	40
4	Mexico	39
5	Germany	37
6	Japan	31
7	South Korea	26
8	Italy	25
9	Saudi Arabia	23
10	China	22
11	Colombia	21
12	United Kingdom	21
13	Russia	19
14	Argentina	19
15	Katar	18
16	Spain	17
17	France	17
18	Iran	17
19	Belgium	16
20	Netherlands	14
21	Ecuador	14
22	Taiwan	13
23	Turkey	13
24	Australia	12
25	Costa Rica	11
26	Poland	10
27	Dominican Rep.	10
28	Peru	9
29	Vietnam	7
30	Chile	6

3b – Adjusted Ranking		
Ranking	Country	Type of Market*
1	USA	2/1
2	Canada	1/2
3	UAE	2
4	Mexico	1/2
5	Germany	1
6	Italy	1
7	Saudi Arabia	2
8	China	1
9	United Kingdom	1
10	Colombia	1
11	Russia	1
12	Argentina	1
13	Katar	2
14	Spain	1
15	France	1
16	Iran	1
17	Belgium	1
18	Netherlands	1
19	Ecuador	1
20	Turkey	1
21	Costa Rica	1
22	Poland	1
23	Dominican Rep.	1
24	Peru	1
25	Chile	1
26	Japan	1
27	South Korea	1
28	Australia	1
29	Taiwan	1
30	Vietnam	1

* (1) Slabs; (2) Finished products

Chart 4 - Main Brazilian Export Destinations of Dimension Stones in 2016 under NCM 2516 (by decreasing order of physical volume)

Ranking	Country	Weight (1000 t)	Score
1	China	732,1	20
2	Italy	108,9	19
3	Taiwan	72,9	18
4	Hong Kong	30,7	17
5	Spain	12,8	16
6	France	10,6	15
7	Argentina	7,4	14
8	Vietnam	7,2	13
9	Belgium	6,2	12
10	India	5,9	11
11	Poland	5,2	10
12	Albania	5,0	9
13	USA	4,9	8
14	Seychelles	2,6	7
15	Canada	2,1	6
16	Germany	1,5	5
17	Switzerland	0,9	4
18	Macaw	0,8	3
19	Portugal	0,7	2
20	Bangladesh	0,7	1

Chart 5 - Main Global Importers of Dimension Stones in 2015 under NCM 2516 (by decreasing order of physical volume)

Rankin g	Country	Weight (1000 t)	Score
1	China	5.490	15
2	Taiwan	1.045	14
3	Italy	672	13
4	United Kingdom	505	12
5	Polandia	413	11
6	Spain	378	10
7	France	350	9
8	Singapore	316	8
9	Germany	213	7
10	Switzerland	211	6
11	Belgium	190	5
12	Thailand	145	4
13	Netherlands	130	3
14	Portugal	110	2
15	Austria	104	1

Chart 6 – Ranking of Markets for Brazilian Exports of Dimension Stones under NCM 2516

Ranking	Country	Total Scores
1	China	35
2	Taiwan	32
3	Italy	32
4	Spain	26
5	France	24
6	Poland	21
7	Hong Kong	17
8	Belgium	17
9	Argentina	14
10	Vietnam	13
11	Germany	12
12	United Kingdom	12
13	India	11
14	Switzerland	10
15	Albania	9
16	USA	8
17	Singapore	8
18	Seychelles	7
19	Canada	6
20	Portugal	4
21	Thailand	4
22	Macaw	3
23	Netherlands	3
24	Austria	1
25	Bangladesh	1

	Markets for Blocks and Slabs

Figure 1 - Market Structure and Articulation for Dimension Stones in the USA