Norwegian Institute of International Affairs

Policy Brief
[5 / 2016]

Mispricing Argentine soybean exports

Verónica Grondona and Martín Burgos

I. Introduction

The main objective of transfer pricing manipulation is tax avoidance. Less recognized is its significant impact on capital flight in developing countries. Transfer pricing manipulation makes possible the transfer of assets abroad as if they were part of normal business activity, sometimes circumventing exchange restrictions.

Capital flight through transfer pricing manipulation can take various guises, from export under-invoicing, import over-invoicing, services and royalties over-invoicing, to financial transactions and business restructurings with tax minimization objectives, all of them designed to articulate Global Wealth Chains ('GWCs' Seabrooke and Wigan 2014). In GWCs the value created in developing countries generates profits and wealth elsewhere, often in entities strategically located in jurisdictions that provide fiscal benefits, targeted rules, financial secrecy, and the effective protection of the true identity of beneficial owners.

Transfer pricing mechanisms impact across the wealth chain when a company produces locally - taking advantage of lower costs, production and consumer subsidies, and the local level of education or infrastructure - but uses intra-firm prices to erode the tax base and shift value out of the country.

Several methodologies have been applied to estimate the volume of illicit financial flows occurring through transfer pricing. These can be divided in two broad groups: those using trade data to estimate what is usually referred to as trade mis-pricing or mis-invoicing and its impact; and those using foreign direct investment (FDI) data to estimate the amount of profit shifted.

In relation to the first, methodologies that aim to generate a global number from macro-data, for example, comparing the export data of a country with imports registered in another (country-partner methodologies), end up facing the impossibility of clearly isolating that which they are measuring. Ones using micro-data require sufficiently comparable prices, or else must resort to price-filter analysis and risk under-estimating the value of mis-invoicing (see Pak, 2012). None of these methods address illicit financial flows occurring through payments for intragroup services, royalties, or financial transactions.

Methodologies based on FDI data, though useful for capturing a global picture, are difficult to apply at a local level due to a lack of financial information in developing countries on multinational entity investments (with affiliates) in such countries (and the bureaucratic difficulties in obtaining such information). Moreover, such approaches (see UNCTAD [2015]) do not address illicit financial flows occurring through under and over invoicing, or those relating to intragroup services and/or royalties.

II. The Argentine Soybean Sector

The main world producers of soybean are the United States, Brazil, Argentina, China and India. China is also the largest importer, followed by the European Union, Mexico and Japan. The United States is the largest exporter, followed by Brazil, Argentina, Paraguay and Canada. Argentina is by far the largest exporter of soybean oil, followed by Brazil, the United States, the Netherlands and Paraguay [Murphy, Burch and Clapp; 2012]

1 This brief draws from Working Document No 71 (Fuga de Capitales VI. Argentina 2015. Estimación de los precios de transferencia. El caso del complejo sojero) by Grondona and Burgos under the coordination of Jorge Gaggero (Coordinator of the Capital Flight Program ("Fuga de Capitales") of the CEFID-AR) and published by the Centre of Economy and Finance for Development in Argentina (Centro de Economía y Finanzas para el Desarrollo de la Argentina) (CEFID-AR) July 2015,and in collaboration with the "Systems of Tax Evasion And Laundering" (STEAL), project (#212210) of the Research Council of Norway. The longer document is available at http://www.cefid-ar.org.ar.

Archer Daniels Midland (ADM), Bunge, Cargill and Louis Dreyfus (known as the ABCD companies), are the largest four grain traders in the world. The global soybean market is dominated by the 'ABCD' companies. [Murphy, Burch and Clapp; 2012]

Soybean is a key product for Argentina due to its contribution to foreign exchange and tax income (particularly in relation to export duties). It is also the main export to China, Argentina's second largest commercial partner after Brazil. It is notable that these exports are concentrated in very few enterprises, including Cargill, Nidera, Dreyfus, Toepfer and others of Argentine origin (Bunge, Deheza, Vicentin, Oleaginosa Moreno, Molinos).[2]

The soybean sector not only exports goods to related parties but is involved in financial and service transactions with related parties, and commissions and logistics payments used with related and non-related parties for base erosion and profit shifting [Argibay Molina, 2013].

III. Export set and methodology

This policy brief analyses the exports of soybean, soybean oil and soybean meal from Argentina by a group of transnational enterprises. The exports of these three products represented 24% of all of Argentine exports in 2013, 22% in 2012, 24% in 2011, and 25% in 2010.

Table 1. Soybeanexports in Argentine total exports

Year	2010	2011	2012	2013
Soybean meal	12%	12%	13%	14%
Soybean oil	6%	6%	5%	5%
Soybean	7%	6%	4%	5%
Subtotal	25%	24%	22%	24%

Source: Trademap

Eight companies dedicated to the export of soybean and related products have been selected for analysis. This selection is based on a list of companies fined by the Argentine tax authorities for paying export duties below the level required for soybean exports. The firms had referenced an outdated export duty; lower than that in place at the moment of the purchase of the grains to be exported. [Gaggero, Rua, Gaggero, 2013: 78]

Table 2. Fines levied on cereal companies May 2013

Exporter	Millions of US$
Cargill	228
Bunge	126
LDC-Dreyfus	141
Molinos	197
Nidera	132
Aceitera General Deheza	48
Vicentín	62
Oleaginosa Moreno	17
Alfred Toepfer	33.6
Total	984.6

Table 3 shows each of the exporters analysed, the group they belong to, and the jurisdiction where headquarters are located.

Table 3. Exporters, Group Membership and Headquarters Location

Exporter	Group to which it belongs	Headquarter	Jurisdiction of location of headquarter
Aceitera General Deheza	Urquía Group	Aceitera General Deheza S.A.	Argentina
Bunge	Bunge	Bunge Limited	Bermuda
Cargill	Cargill	Cargill, Inc	United States
Dreyfus	Louis Dreyfus	Louis Dreyfus Holding B.V.[3]	Netherlands
Nidera	Nidera	Nidera B.V.	Netherlands
Oleaginosa Moreno	Glencore	Glencore plc	Switzerland
Toepfer	ADM	Archer-Daniels-Midland Company	United States
Vicentin	Vicentin	Vicentin S.A.I.C.	Argentina

Source: Based on company websites, annual reports and Gaggero, Schorr, Wainer [2014: 107]

The exports of these companies represented 69% of soybean meal exports in 2013; 67% of soybean oil exports, and 48% of the soybean exports.

Table 4. Companies share of Argentine soybean exports

Year	2010	2011	2012	2013
Soybean meal	73%	68%	67%	69%
Soybean oil	81%	71%	71%	67%
Soybean	61%	51%	46%	48%

Source: Trademap and Penta Transaction

Soybean exports are less significant because soybean oil and meal is processed by the multinational companies and subsequently exported. This processing implies higher entrepreneurial content in soybean meal and oil exports, and lower in soybean, where there is some participation of national exporters and cooperatives.

Here, we compare the average price of daily customs registrations between 2010 and 2013 with the price of an international quote on shipment date.

This methodology is the closest to what is known as the "Sixth Method" in transfer pricing[4], applicable according to Argentine law to, '*...exports made to related parties, that relate to cereals, oil products, and other products of the earth, hydrocarbons and its by-products, and, in general, goods that have a known quote in international markets, in which an international intermediary is involved that is not the effective recipient of the*

2 In October 2014, China entered the market through the acquisition by Cofco of the Nidera and Noble Group, controlling through them almost 10% of Argentina's grain exports.

3 LDC Argentina S.A. has been controlled since 2007 by Galba SA (75 %), a company resident in Switzerland, and related to LDC.The headquarters of the LDC group are in the Netherlands. Ultimate control is ina trust named Akira, whose beneficial owner is the Luis Dreyfus family.

4 Sixth paragraph incorporated by Article 2 of the Law N° 25.784 of October 2003, following the fifth paragraph of Article 15 of the Profit Tax Law("Ley de Impuesto a las Ganancias"), text ordered by in 1997 and its modifications.It is called the sixth method because it was incorporated after the five methods for transfer pricing valuation described in Article 15, which consist of the traditional transactional methods (the Comparable Uncontrolled Price Method, the Resale Method and the Cost Plus Method); and the transactional profit methods (Transactional Net Margin Method and the Profit Split Method). The sixth method is applicable to commodities and is distinct because it draws a comparison with a market quote, instead of allowing the comparison to be made with transactions and prices agreed between unrelated parties. For more details see Grondona [2014].

merchandise…'. In such cases, the price should be calculated based on '…the trading value of the goods in a transparent market on the date on which the goods are shipped'. The Sixth Method is not applicable when the taxpayer can demonstrate that the foreign intermediary has economic substance[5]. In this case, the best of the five remaining methods prescribed by law should be applied. These are based on the "arm's length" principle, which requires that transactions between related parties should mirror a similar (and often theoretically construed) transaction between unrelated parties.

Here, the comparison was drawn with price quotes on the Gulf of Mexico; which is one of the markets for soybean products; the other is Chicago.[6]

IV. Mis-invoicing soybean exports

Applying this methodology, the average mis-invoicing of exports in the soybean sector was close to 10%, amounting to as much as US$1,500 million per year.

Table 5. Soybean Export under-pricing

Year	Soybean meal	Soybean oil	Soybean	TOTAL
2010	-672,689,866	-327,886,389	-242,665,029	-1,243,241,284
2011	-553,279,766	-257,674,139	-117,655,984	-928,609,890
2012	-1,134,870,549	-163,414,113	-212,319,241	-1,510,603,903
2013	-717,142,518	-251,908,091	-168,319,051	-1,137,369,659
2010	-11%	-10%	-8%	-10%
2011	-8%	-7%	-4%	-7%
2012	-16%	-5%	-15%	-13%
2013	-10%	-10%	-9%	-9%

Source: Reuters and Penta Transaction

Export over-invoicing did not exceed 2% over the same period.

Table 6. Soybean Export over-pricing

Year	Soybean meal	Soybean oil	Soybean	TOTAL
2010	21,182,572	2,336,356	43,365	23,562,293
2011	32,390,020	12,470,257	44,528,967	89,389,244
2012	42,196,592	24,541,622	8,603,375	75,341,589
2013	66,439,64	2,041,905	5,372,137	73,853,506
2010	0%	0%	0%	0%
2011	0%	0%	2%	1%
2012	1%	1%	1%	1%
2013	1%	0%	0%	1%

Source: Reuters and Penta Transaction

It should be noted that this methodology does not allow for a complete analysis of the impact of the use of intermediaries for profit shifting in commodity exports[7], which motivated It should be noted that this methodology does not allow for a complete analysis of the impact of the use of intermediaries for profit shifting in commodity exports[7], which motivated the incorporation of the so-called 'Sixth Method' in Argentine legislation (followed by other commodity exporting countries). In this sense, the analysis of export prices should be made along with analysis of the margin retained by intermediaries, often justified by commissions and logistics expenses [Argibay Molina, 2013]. It is evident that one price is related to the other, and that such operations are integrated. [Grondona, Picciotto; 2015]

Similarly, this analysis does not shed light on illicit financial flows channeled through other transfer pricing mechanisms, such as financial transactions, payments for intangibles or services, and the import of goods. Estimates of the manipulation of intragroup prices are likely to be higher where these distinct transfer pricing mechanisms can be identified and incorporated in analysis.

V. Conclusions

Many developing countries are particularly concerned with problems of transfer pricing in the extractive industries, which are often significant components of their economies. Similar to other sectors, profit attribution may be highly dependent on the valuation of commodity exports. Consequently, a number of developing countries have adopted the so-called 'Sixth Method', following the Argentine experience. This aims to establish a clear and easily administered benchmark and avoid the need for subjective judgment and discretion [Picciotto; 2015].

However, even when the application of the Sixth Method is legislated for, and given Argentina's extended experience dealing with commodity mis-invoicing (experience going back to at least 1935), the data shows that such practices are still employed by multinational companies, resulting in under-invoicing by approximately 10% in the soybean sector.

While this analysis does not differentiate between exports to related and non-related parties, based on the levels of concentration and integration in the sector, it should be assumed that there is either an economic linkage between parties or the possibility of applying trade mispricing mechanisms as if such a linkage existed [Argibay Molina, 2014].

Intragroup pricing may be used to dampen the effect of international price volatility. The level of integration and concentration in particular GWCs implies that risk mitigation may work in practice as both an entry barrier for smaller participants and a platform for the use of mis-pricing mechanisms.

5 An international intermediary is understood to have economic substance if it complies with a minimum set of conditions explicitly referred to in Article 2 of Law 25.784; namely: that the main activity of the intermediary does not consist in receiving passive rents; that the intermediary has a 'real' presence in the residence jurisdiction; and that the intermediary performs activities with other entities outside the multinational group.

6 In the specific case of Argentina, the Ministry of Agriculture also publishes soybean product prices used by the Tax Authority for the application of the sixth method, but these are not market quotes. These prices follow those on the Gulf of Mexico.

7 This has been attempted in Cobham, Jansky, and Prats [2014].

VI. Bibliography

ARGIBAY MOLINA, J.A. (2013) The Phenomenon of Trade Mispricing: Untying the Knot for a Legal Analysis. McGill University, Faculty of Law, Montreal, August 2013.

COBHAM, A.; JANSKÝ, P.; PRATS, A. (2014) Estimating Illicit Flows of Capital via Trade Mispricing: A Forensic Analysis of Data on Switzerland. CENTER FOR GLOBAL DEVELOPMENT. Working Paper 350. Enero 2014.

GAGGERO, J., RUA, M., GAGGERO A. (2013) FUGA DE CAPITALES III. ARGENTINA (2002-2012). Magnitudes, evolución, políticas públicas y cuestiones fiscales relevantes. Working Document N° 52. Buenos Aires, December, 2013.

GAGGERO, A.; SCHORR, M.; WAINER, A. [2014] Restricción eterna, el poder económico durante el kirchnerismo. Futuro Anterior Ediciones, 2014.

GRONDONA, V. (2014) Fuga de capitales IV. Argentina, 2014. La manipulación de los "precios de transferencia". Con la supervisión de Jorge Gaggero. CEFID-AR. Working document Nº 58. Buenos Aires, June 2014.

GRONDONA, V. (2015) TRANSFER PRICING MANIPULATION AND CAPITAL FLIGHT. VI Congreso 2015 "El futuro del desarrollo argentino". Fernando Peirano (comp.). Asociación de Economía para el Desarrollo de la Argentina (AEDA). May, 2015. URL: http://www.aeda.org.ar/

GRONDONA, V.; PICCIOTTO, S (2015) "Response to Action 10 Discussion Draft on the Transfer Pricing Aspects of Cross Border Commodity Transactions". BEPS MONITORING GROUP. With comments and input from other BMG members. February 2015. URL https://bepsmonitoringgroup.files.wordpress.com/2015/02/ap-10-commodities.pdf

MURPHY, S.; BURCH, D.; CLAPP, J. (2012) Cereal Secrets. The world's largest grain traders and global agriculture. OXFAM Research Reports. August, 2012

PAK, S.J. (2012) Lost billions. Transfer Pricing in the Extractive Industries. Trade Research Institute Inc. January, 2012. URL: http://www.eurodad.org/files/pdf/520a3370c0889.pdf

PICCIOTTO, S. (2015) Overall Evaluation of the G20/OECD Base Erosion and Profit Shifting (BEPS) Project. BEPS MONITORING GROUP. With comments and input from other BMG members. October 2015. URL: https://bepsmonitoringgroup.files.wordpress.com/2015/10/general-evaluation.pdf

SEABROOKE, L. and WIGAN, D. (2014) "Global Wealth Chains in the International Political Economy", *Review of International Political Economy*, Vol. 21, No. 1, pp. 257-263.

UNCTAD (2015) FDI, Tax and Development. The fiscal role of multinational enterprises: towards guidelines for Coherent International Tax and Investment Policies. UNCTAD, Investment and Enterprise Division. A working paper for review and feedback. March 26, 2015.

NUPI Norwegian Institute of International Affairs

Established in 1959, the Norwegian Institute of International Affairs [NUPI] is a leading independent research institute on international politics and areas of relevance to Norwegian foreign policy. Formally under the Ministry of Education and Research, NUPI nevertheless operates as an independent, non-political instance in all its professional activities. Research undertaken at NUPI ranges from short-term applied research to more long-term basic research.

About the Authors
Verónica Grondona is a researcher at CCC (Centro Cultural de la Cooperación), graduated in Economics (University of Buenos Aires, 2000), with Postgraduate studies in Finance (Universidad Torcuato Di Tella, 2003). Her main research interests relate to transfer pricing manipulation, base erosion and capital flight.

Martín Burgos is Coordinator of the Political Economics Department of the Centro Cultural de la Cooperación (CCC, Buenos Aires), graduated in Economics (University of Buenos Aires), with a Master Degree in Comparative Studies on Development(École des Hautes Etudes en Sciences Sociales, Paris, France). His main research interests relate to international commerce.

NUPI
Norwegian Institute of International Affairs
C.J. Hambros plass 2D
PO Box 8159 Dep. NO-0033 Oslo, Norway
www.nupi.no | info@nupi.no