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Documento publicado en:
Anales, 2015
Asociación Argentina de Economía Política

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Cómo citar el documento:

Nougues, J., O'Connor, E. (2015, noviembre). Rents, "infant industry" and contingent protection policies : gains and losses for Argentina's biodiesel industry [en línea]. Anales de la Asociación Argentina de Economía política. Disponible en: <http://bibliotecadigital.uca.edu.ar/repositorio/investigacion/rents-infant-industry-contingent.pdf> [Fecha de consulta:]



ASOCIACION ARGENTINA
DE ECONOMIA POLITICA

ANALES | ASOCIACION ARGENTINA DE ECONOMIA POLITICA

L Reunión Anual

Noviembre de 2015

ISSN 1852-0022

ISBN 978-987-28590-3-9

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Rents, “infant industry” and contingent protection policies: gains and losses for Argentina’s biodiesel industry

Julio Nogués¹ and Ernesto A. O’Connor²

Resumen

La industria del biodiesel comenzó a crecer rápidamente desde 2007 como una alternativa para exportar el creciente volumen de soja producida en el país. Inicialmente, en respuesta a políticas claramente inclinadas hacia las ventas al exterior, la mayor parte de la producción se exportaba. Pero esos incentivos a las exportaciones pusieron en riesgo la inversión cuando la UE impuso medidas antidumping. Desde entonces, las políticas se han inclinado hacia las ventas al mercado interno, a costa de precios de biodiesel controlados por el gobierno, generando rentas, que son analizadas en este trabajo.

Abstract

The biodiesel industry started growing fast since 2007 as an alternative to exporting the growing volume of soybeans produced in the country. Initially, responding to policies clearly tilted towards foreign sales, most of the output was exported. Such export incentives put investment at risk when the EU imposed antidumping measures. Since then and until recently, policies have been tilted towards sales in the domestic market but at the cost of government controlled biodiesel prices that imply rents, which are analyzed in this paper.

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JELCodes: F14, O13, Q17, Q18.

Keywords: Empirical Studies of Trade, Economic Development and Agriculture, Agriculture in International Trade, Agricultural Policy.

1. Introduction

Argentina has a long tradition of promoting industrialization with high and discretionary import barriers that opens the door to rent seeking activities. This industrial promotion policy has frequently been accompanied with a strong discrimination against agriculture and as a consequence, for most of the last eighty years, the rate of the country's per capita GDP growth has lagged well behind comparator countries³.

Since 2002 and after a decade when the country attempted to implement more open trade policies than in the past, the government has once again implemented highly protectionist policies with the goal of deepening industrialization by resorting to trade policies that have violated a great number of WTO rules (Baracat and others 2013)⁴. These broken rules apply to imports but not to agricultural export policies that in fact the WTO does not regulate (ICSID 2014). The discretion that the Government has to decide the height and policy composition of export barriers also creates opportunities for rent seeking activities.

³ Several studies have addressed the long run price discrimination against agriculture including among others Colomeet. al. (2011), Díaz Alejandro (1975), Nogués (2011), Reca (1980) and Sturzenegger and Salazni (2007). Díaz Alejandro and Nogués rely heavily on insights from the theory of comparative advantage. Obviously other policies have contributed to the decline but these other can only survive in a closed economy.

⁴ A detailed analysis of import barriers and foreign exchange controls implemented since around 2003 in violation of WTO rules is presented in Baracat et. al (2013). These barriers led several countries to dispute them in the WTO and the Panel established by its Dispute Settlement Body has found the country in violation of several multilateral rules and agreements. The Panel report can be consulted in:

https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S009-DP.aspx?language=E&CatalogueIdList=126686,126687,124557,120898,120065,116986,113738,50956,104754,103748&CurrentCatalogueIdIndex=0&FullTextSearch.

Since 2003 this discretion has been used intensively to set very high export barriers against primary agricultural producers. Under this setting, several agro industries have benefited from low prices of primary inputs such as wheat mills, animal feed and chicken meat among others. For example, while the export tax on chicken meat is 5%, the export barrier on maize is approximately equivalent to 35% implying a 25% subsidy⁵.

The biodiesel industry was born and initially grew rapidly by the Government's tuning of these export barriers. The idea has been to develop an "infant industry" that adds value to the 50 to 55 million tons of soybeans produced annually by the country. The purpose of this paper is to illustrate how this industry was born towards by estimating the value of rents from export barriers and how other recent policies have detracted from the initial export incentives.

The rest of this paper is organized as follows. Section 2 provides a summary overview of the rise and decline of this industry. Section 3 analyzes the vulnerability of export promotion policies to existing WTO rules for contingent protection. Section 4 explains the changing nature of policy instruments and their short run impacts on the industry's production levels since the EU applied an antidumping measure (AD) against biodiesel imports from Argentina (and Indonesia). Section 5 quantifies the magnitude of rents from export promotion policies and of the negative rents created by official biodiesel prices in domestic sales. Section 6 presents the concluding remarks.

2. Triggering the rise and containing the fall of the biodiesel industry (2007-2015)

Biodiesel is an alternative fuel produced from domestic renewable resources such as soybean oil that can be mixed with petroleum diesel to achieve a blend used in internal combustion engines (diesel). Biodiesel has environmental benefits, as it is biodegradable, renewable and non-toxic, mostly free of sulfur and aromatic compounds

⁵See Nogués(2015).

potentially carcinogenic. It reduces the emission of hydrocarbons and carbon monoxide and saves CO₂ emissions produced by fossil fuels, thus reducing greenhouse gases⁶.

Argentina is the third soybean producer in the world after the United States (US) and Brazil and the top soybean oil exporter. In Argentina biodiesel is made mainly from soybean oil so developing this industry was seen by private interests and the Government as an opportunity to process increasing quantities of soybean domestically. In 2007 this industry was practically nonexistent but by 2011 it had become the fourth producer and the leading exporter of biodiesel in the world. This initial boom has more recently receded and the industry is now highly dependent on discretionary government policies. What did process evolved?

Prompted by private interests, in 2006 the government decided to create the incentives necessary to attract investments into what was then a practically a non-existent biodiesel industry. Law 26.093 was passed in 2006 and shortly after, its regulatory decree 109 was issued in 2007. The Secretaría de Energía is the government office responsible for administering this legislation. This Secretaría sets quality and technical standards and decides the cutting or mixing levels of biodiesel with fossil fuels. The Secretaría also fixes the domestic sale price of biofuels like biodiesel and bioethanol.

The initial takeoff of the industry relied on export sales that were supported by escalated export taxes. As mentioned, the main tradable input used in the production of biodiesel is soybean oil that since 2008 faces an export tax of 32%. This industry in turn is supported by a 35% export tax on soybean. Soybean oil and biofuels are certainly not the only agro industries supported by escalated export taxes and this policy differentiates Argentina from other efficient countries like Australia that offer free trade incentives to its agro industries. Initially the government implemented an export tax on biodiesel of 14% i.e. an 18 basis points difference with the rate on soybean oil. Shortly after, the big established soybean oil companies like Cargill, Molinos, Noble, Renova and Vicentin initiated investments that expanded productive capacity rapidly.

⁶For more details see <http://carbio.com.ar/certificacion/>

Through price discrimination the government has also promoted small and medium sized companies (appendix 1 lists the main firms in the industry).

Table 1 shows production and exports for 2009-2014. Initially as mentioned, nearly all of the output was exported but in more recent years this share has declined quite substantially. Also note that production, exports and the export to output ratio all bottomed out in 2013 when output fell at a yearly rate of 19%. Apparently the reason was a sudden increase in the export tax rate on biodiesel from 14% to 22%⁷, in September 2012, that reduced the industry's profitability from foreign sales. Why was the export tax increased so unexpectedly?

Table 1: Argentina's Biodiesel Production and Exports (2008-2014)

Year	Production (000tn)	Domestic Market Sales (000tn)	Exports (000tn)	Exports/Production, %	Exports (million US\$)
2008	712,06	24	688	24	na
2009	1179,0	30	1149	97,5	913
2010	1814,9	457	1358,4	74,8	1225
2011	2426,7	737	1681,9	69,6	2088
2012	2455,1	897	1557,4	63,5	1778
2013	1997,1	848	1149,2	57,5	1169
2014	2580,0	980	1500,0	60,6	1394

Na: notavailable.

Source: CARBIO (production) and INDEC, Mecon (exports).

3. Contingent protection against the biodiesel industry

⁷Decree 1719/2012 created a variable export tax rate on biodiesel. For a quite detailed discussion, see Sonnet and others (2014).

As mentioned by 2012 Argentina had become the leading biodiesel exporter in the world and as shown in Table 2, Spain its main destination. Then in 2013 as a consequence of the EU's antidumping measure, this trend suddenly ended and exports to this destination dropped by 73% from US\$ 982 million to US\$ 270 million dollars.

Table 2: Argentina's biodiesel exports by destination (000 dollars)⁸

Country	2012	2013	2014	2014 %
World	1.774.496	1.055.429	1.305.165	100,0
Spain	982.195	270.754	399.016	30,6
USA	s/d	387.421	140.823	10,8
Peru	184.485	182.577	203.830	15,6
UK	0	0	229.326	17,6
Korea	0	0	12.184	0,9
Australia	0	24.742	22.680	1,7
Subtotal	1.166.680	865.494	1.007.859	77,2
Others	607.816	189.935	297.306	22,8

Source: Trade Map.

a. Contingent protection against biodiesel imports from Argentina

The EU and Peru have both opened contingent protection investigations against biodiesel imports from Argentina but according to WTO sources, Peru's is still being

⁸ Data from trade map show small differences with INDEC's data.

processed⁹. Initially the EU opened two investigations against biodiesel from Argentina (and Indonesia): an antidumping on August 29, 2012 and a countervailing investigation on November 10, 2012. Although eventually this later investigation was dropped it is of interest to speculate why. The document opening the EU's countervailing investigations mentions that:

"The subsidies consist of the provision of inputs (soybean or soybean oil in case of Argentina and palm oil in case of Indonesia whether refined or unrefined) at below-market prices by means of government policies implemented and enforced by a policy of export taxes. In both countries concerned an export tax is charged on the input product(s), at rate(s) which is/are often higher than that charged on the export of biodiesel. This approach effectively obliges the input producers to sell on the domestic market, thus creating an excess of supply, depressing prices to a below-market level and artificially reducing the costs of the biodiesel producers. It is alleged that the above schemes are subsidies since they involve a financial contribution from the Government of Argentina and Indonesia (in the form of the entrustment and/or direction of the input producers to provide goods to the domestic biodiesel industry, or through income or price support) and confer a benefit to the recipients because the goods are provided for less than adequate remuneration. They are alleged to be limited to certain enterprises producing a subset of products in the agricultural sector, and are therefore specific and countervailable"(European Union 2012).

There is no doubt that the EU was behind the export subsidy implied by the policy of export tax escalation but as mentioned, this investigation was eventually closed. Why? We suspect that two factors played a role. First, the absence of clear enforceable WTO rules on agricultural and agro industrial exports has put an important obstacle to countervailing measures against incentive policies of the type used by Argentina (ICSID 2014). Second, given that on September 2012 Argentina raised the export tax on biodiesel from 14% to 22%, the subsidy case against Argentina lost much of the initial drama. The countervailing investigation we suspect, is then the reason why the government increased the export tax rate because if the EU would have proceeded, a

⁹ WTO trade monitoring database: www.tmdb.org.

countervailing measure would have set a risky precedent for other agro industrial exports. Be that as it may, after Argentina increased its export tax rate, the EU decided that it was sufficient for its purposes to put the weight of the compensating barrier to the injury inflicted on its biodiesel producers with an antidumping barrier¹⁰.

We are also tempted to speculate that the way Argentina nationalized the Spanish owned Repsol petroleum company in May 2012 must have added political pressure on the EU antidumping investigation. This was a unilateral decision initially accompanied with strong nationalist wording and the threat of no compensation¹¹.

As mentioned, the only other country that we know of initiating a countervailing case against biodiesel imports from Argentina is Peru in 2014 but the WTO database is not yet reporting the final decision¹². One final issue deserves a comment. Most of the contingent protection investigations are initiated by countries that have domestic producers not willing to adjust at the pace required by a sudden and rapid growth of subsidized imports. We already mentioned the case of Spain but the same pattern occurred in Peru where according to trademap statistics, imports from Argentina grew from nil in 2011 to around USD 180 million in 2012 and 2013. With its export promotion policies for biodiesel, the government of Argentina appears to overlook this. In contrast to biodiesel, since 2008 the soybean oil industry pays a 32% export tax while the tax on soybeans is 35% i.e. a 3% differential with which this industry has been able to expand production and exports during many years. At the light of this experience, the biodiesel industry did not require as wide a difference in export taxes as the government set initially.

¹⁰Unlike many other countries including in Latin America, EU's AD policies are characterized by setting barriers close to the maximum time allowed by the WTO rules (5 years) and usually by the full dumping margin. Generally Latin America antidumping legislation is quite less protectionist (Finger and Nogués 2006).

¹¹Argentina has disputed the EU's antidumping measure and the WTO Panel is expected to rule before yearend. The current status of this dispute is summarized in https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds473_e.htm.

¹²Contingent protection measures in Peru are of lesser duration and intensity than those applied by the EU (Finger and Nogués 2006). In both cases, the measures can be renewed but only after an investigation proving the case. It should also be mentioned that Law 26.942/2014 provides fiscal incentives to the industry which might well have fallen into Peru's investigation.

b. Policy response to the EUs AD duty

Faced against this crisis, domestic producers sought to compensate the lost export market share by increasing the cutting with biodiesel and diesel fuels from 5% to 10% in February 2014. More recently in June 2014 the government also reduced the biodiesel export tax rate from 21,8% to 10,3% and eventually, in February 2015 to 8,89%. Obviously the shift in this parameter is once again risking the initiation of new contingent protection investigations against biodiesel exports from Argentina. In any case, these policy reactions appear to be driven more by short run requirements than from a long run development strategy. Therefore, through highly discretionary policies that exist today but may not exist tomorrow, sales to the domestic markets have increased and exports to non EU countries are growing (like Korea, UK and USA as seen in Table 2)¹³.

In short, by manipulating three policy parameters quite discretionally (export taxes, the cutting rate of diesel with biodiesel and the selling price to the domestic petroleum industry) the government has supported the industry but at the cost of added risks from possible contingent protection measures in some destination markets. These policies also create positive and negative rents to the biodiesel industry which are estimated in the next section.

4. Policy-created rents faced by the biodiesel industry

The policies determining the aggregate amount of rents to the biodiesel industry are: i) the export tax rate on biodiesel, ii) the export tax rate on soybean oil, (the main input used for producing biodiesel), iii) the official prices at which biodiesel enterprises are required to sell to the oil refining companies and, iv) the percent of cutting with biodiesel

¹³At the international level it should be mentioned that the US Environmental Protection Agency (EPA) approved the scheme of traceability of renewable biomass (soybean) presented in August 2012 that opened the door to imports from Argentina.
<http://biodiesel.com.ar/8961/estados-unidos-aprueba-el-ingreso-de-argentina-a-programa-de-creditos-para-biocombustibles>

required in diesel sold to the domestic market. Each of these policy parameters has had a particular impact on the biodiesel industry and this section seeks to quantify them.

a. Escalated export tax rates

In much the same way as escalated import tariffs confer effective protection to import competing industries, escalated export taxes with rates higher on tradable inputs than on the final products, also confer effective protection. We will label "rent" to the dollar value of the effect on net income that is produced by this escalation. We rely on the following equations:

$$R_j = -P_{lj}D_j + a_{1j}P_{la1j}Da1 \quad (1)$$

$$AR_j = R_j \times E_j \quad (2)$$

where R_j : rent per ton of biodiesel exports; P_{lj} : international FOB price of biodiesel; D_j : export tax rate on biodiesel; a_{1j} : physical amount of soybean oil necessary to produce a a ton of biodiesel; P_{la1} : FOB price of soybean oil and, $Da1$ is the export tax rate on soybean oil and E_j is tons exported.

This equation is the difference between revenues without and with export taxes, or between free trade and policy-created rents. The first term on the right hand side of equation (1) with a negative sign represents the reduced income from export taxes on biodiesel exports while the second term with a positive sign represents the savings from lower input prices determined by the export tax on soybean oil. The logic of the expression is as follows: rents from exports increase the lower the export tax rate on biodiesel; the higher the physical intensity of the low priced input (a_{1j}), and the higher the export tax on this input.

The two invariant estimating parameters of this equation are as follows:

$a_{1j}=1$, 1 one liter of biodiesel requires 1,1 liter of soybean oil and,

$Da1$: 32% is the export tax rate on soybean oil that has not changed during the period of analysis.

Table 3 presents the data and the value of the rents created by export tax escalation. Except for 2013, the numbers in the last column shows that the rent rate ranging from 18% to 22%, has been quite uniform during this period¹⁴. The strong decline in this rate during 2013 is explained by the increase in the export tax rate from 17% in 2012 to 22%. On the other hand, the aggregate amount of rents determined by the rent rate and the value exported (equation 2) peaked in 2011 (USD 340 million) and bottomed two years later in 2013 (only USD 30 million) as a consequence of the increase in the export tax rate towards the end of 2012, but mainly by EU antidumping measure that essentially closed the European market to Argentina's biodiesel, the the main destination.

Table 3: Biodiesel rents from export tax escalation

Year	FOB biodiesel prices per ton (USD)	FOB soybean oil prices per ton (USD)	Export tax rate on biodiesel	Rents per ton (USD) (2)	Biodiesel exports (000 tons)	Aggregate rents (AR), mill USD)	Rent rate (3)
2010	1.068	914	14%	172	1.358,0	234	21,9
2011	1.608	1211	14%	201	1.690,0	340	21,1
2012	1.404	1157	17%	169	1.558,0	263	18,7
2013	1.430	967	22%	26	1.149,0	30	2,1
2014	1.074	833	16%	121	1.500,0	194	18,1
2015(1)	892	711	8%	179	na	na	na

Notes: (1) average January-march; (2) estimate of equation 1 and, (3) rent per ton/FOB biodiesel. Na: not available.

Source: Author's elaboration based on data from: (i) FOB biodiesel prices: Biodiesel-National Weekly Ag Energy Roundup, USDA-Agricultural Marketing Service,

¹⁴The rent rate estimated for biodiesel is not that different from rates estimated for other agro industries that also profit greatly from escalation of export taxes such as: wheat flower (18%); chicken meat (25%) and animal feed (16%). Chicken meat and animal feed are also sectors that have grown rapidly in recent years (Nogués 2015).

<http://www.ams.usda.gov/mnreports/lswagenergy.pdf>, and Diesel-U.S.DOE, Energy Information Administration, Monthly Retail On-Highway Diesel Prices <http://www.eia.gov/oog/info/wohdp/diesel.asp>; (ii) FOB soybean oil: Ministerio de Agricultura, Argentina and, (iii) export tax rates on biodiesel and soybean oil from AFIP.

Summing up, the biodiesel industry has received significant rents from escalated export taxes. Note that these rents are fully financed by primary producers who have to sell their primary products with heavy discounts determined by export barriers while the governments simply issues the rates discretionally. We are not aware that any of these decisions has been supported by complete analyses of possible impacts including impacts on employment and on small and medium sized enterprises.

What is not that clear are the groups that are able to internalize at least part of these rents. Some candidates include excessive wages, inland transport costs known to be well above those prevailing in neighboring countries and obviously, excessive profits. The literature has also considered that rents may also be paying for corruptive deals (Krueger 1974). Are there other candidates that may be appropriating these rents? Yes, the government through high tax pressure on the agricultural sector that in fact pays for the rent coming from low soybean oil and as we see next the petroleum industry.

b. Impact of official biodiesel prices on the industry's rents

As mentioned, two other parameters determine the value of rents created by public biodiesel policies: 1) the official prices at which biodiesel enterprises are required to sell to the oil refining companies and, 2) the cutting of biodiesel with fossil diesel sold to the domestic market. The cutting should be compulsory by law but the experience of recent years suggests that the legal parameter has not always been enforced.

In any case, whatever the level of biodiesel used by the petroleum companies, the biodiesel industry has to sell it at an official price set by the UEIM. How does this price compare with the export price and how does this difference affect the value of rents received by the biodiesel industry? In answering these questions, we resort to a simple

expression. Let FAS (free along ship) be the FOB dollar price per ton of biodiesel net of any formal export tax (D):

$$\text{FAS} = \text{FOB} \times (1 - D_j)$$

Then price difference between the exports and the domestic sale price per ton can be expressed as:

$$\text{RO} = \text{FAS} - \text{OP} \quad (3)$$

where OP is the official price set by the UEIM at which the biodiesel industry has to sell to the nationalized petroleum industry. It follows that the rent rate (%RO) is defined by:

$$\% \text{RO} = \text{RO} / \text{FOB} = (\text{FAS} - \text{OP}) / \text{FOB} \quad (4)$$

The following table shows that since 2011 the UEIM has set OP below FAS so since then and in relation to exports, the biodiesel industry has been transferring rents to the petroleum industry where the state-owned YPF enterprise holds a market share above 50%.

Table 4: International and domestic regulated prices of biodiesel (pesos)

Year	FOB prices	Average biodiesel export tax rate	FAS	Domestic regulated prices (OP)	Price difference per ton (RO)
2010	4.059	14%	3.491	3.573	-82
2011	6.885	14%	5.921	5.040	882
2012	6.405	17 %	5.318	4.949	369
2013	7.825	22%	6.123	5.119	1.005
2014	8.706	16%	7.282	6.641	641

Source: Author's elaboration based on: (i) FOB biodiesel prices: Biodiesel-National Weekly Ag Energy Roundup, USDA-Agricultural Marketing Service, <http://www.ams.usda.gov/mnreports/lswagenergy.pdf> and Diesel-U.S.DOE, Energy Information Administration, Monthly Retail On-Highway Diesel Prices <http://www.eia.gov/oog/info/wohdp/diesel.asp>; (ii) export tax rates on biodiesel and soybean oil

from AFIP; OP, prices informed by Secretaría de Energía, Unidad Ejecutiva Interdisciplinaria de Monitoreo (UEIM). We have used the simple average official price among firm sizes.

Official biodiesel prices (OP) are set quite discretionally through a formula that takes into account many factors although it is not at all clear that the UEIM always follows it strictly (Sonnet and others 2015). Also since late 2012, the UEIM sets OP according to size of firms with the biggest firms receiving the lowest prices. In the above table we use average OP prices which understate the transfer of rents from the biodiesel to the petroleum industry as big firms holding the bulk of the market share receive the lowest price. For example, in January 2014 the OP set for the big integrated firms was \$4,902 pesos per ton while the small firms holding the minority share of sales were paid \$6.192 per ton (Sonnet and others 2014).

The aggregate rents transferred from the biodiesel to the petroleum industry are easily estimated from equation (4) according to:

$ARO = RO \times DS$ (5) where DS is tons of biodiesel sold to the petroleum industry.

The following table offers estimates of equations (4) and (5):

Table 5: Aggregate rents and rent rate transferred from the biodiesel to the petroleum based industry (USD)

Year	RO (pesos)	DS (000tons)	$ARO = RO \times DS$ (million U\$S)	%RO
2010	-82	457	-9,9	-2,0
2011	882	737	151,7	12,8
2012	369	897	72,6	5,8
2013	1.005	848	155,7	12,8
2014	641	980	77,5	7,4

Source: Author's elaboration: (i) RO from Table 4 and, (ii) DS: from Table 1. We transform pesos into dollars through the average exchange rate published by Banco de la Nación Argentina.

The results show that the rents transferred from the biodiesel to the petroleum industry range from a low of –USD10 million (a subsidized price to biodiesel producers) in 2010, to USD 156 million in 2013. As shown in Table 6, over the years, the balance of policy created rents applied to the biodiesel industry has been positive.

Table 6: Aggregate rents created by biodiesel policies

	Rents transferred to the petroleum based industry (ARO, million US\$)	Rents received from escalated export taxes AR, (million US\$)	Net rent creation from biodiesel policies (=AR-ARO, million US\$)
2010	-9,9	234	243,9
2011	151,7	340	188,3
2012	72,6	263	190,4
2013	155,7	30	-125,7
2014	77,5	194	116,5

Source: Based on CARBIO, INDEC, Secretary of Energy and USDA.

5. Concluding remarks

For most of the last eight decades commercial policies in Argentina have been discretionary and highly protectionist. Discretion has prevailed over rules for such a long time that industrialization supported by protection has become a cultural value irrespective of the costs to society. Under this setting, there is a generalized belief that Argentina's agro industries are internationally competitive. While our a priori coincides with this belief, commercial policies of the last decade have been so distorted and discretionary that the heavy handed governmental policies makes it impossible to discern which sectors are in fact competitive.

In the title of this paper we use "infant industry" not to refer to what good economics may justify governmental assistance, but simply because in 2007 this industry was nonexistent. Under an open economy with equilibrium macroeconomic policies, good "infant industry economics" would have set some form of time bound assistance to the biodiesel industry. Unfortunately, the policy environment in which Argentina is operating is far from resembling anything close to good policies and so we are unable to know for sure the extent to which the biodiesel industry would perform under commercial policies that abide by the WTO rules.

In contrast to good and stable policies, the biodiesel industry has grown under highly protective policies that obscure its true international competitiveness. One could for example argue that recent biodiesel policies are sustaining an export oriented industry that could not survive under the extreme peso overvaluation in which the country has been standing in recent times.

In short, under present circumstances of bureaucratic discretion and disequilibrium macroeconomic policies, the industry has no better alternatives than those that it is now facing i.e. to hang on the discretion of the government's policies as it has done in recent years. Nevertheless, under good economic policies, we find no reason to argue that this industry would not be internationally competitive and offer growing employment opportunities. What are good economic policies? At the very least, they include equilibrium macroeconomics with a reasonable exchange rate regime and the replacement of discretionary trade controls with WTO rules. Only when this is done, will the government be in a position to determine the incentives required by the biodiesel industry and the costs if any that society will pay.

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