

THE PORT OF MARIEL AND CUBA-BRAZIL'S UNUSUAL "MEDICAL COOPERATION"

María C. Werlau

For over a decade the Brazilian government has committed millions of its taxpayer *reais* to support infrastructure projects, food exports, and an assortment of initiatives benefitting Cuba. This support is nowhere more evident than in the refurbished Port of Mariel. The groundwork for the tight bilateral relationship was laid out just months into the first of two terms in office of then-Brazilian President Luiz Inacio Lula da Silva, of the leftist Partido dos Trabalhadores (PT), or Workers Party.¹ In September 2003, Lula traveled to Havana to unveil bilateral agreements that revealed an alliance with Cuba downplayed during his election campaign. It would continue tightening after Dilma Rousseff succeeded Lula both as President and as leader of the PT in 2003; she was Lula's Minister of Mines and subsequently became his Chief of Staff.² A framework emerged that has prevailed over time: strong political and economic support for Cuba's military dictatorship with unprecedented levels of secrecy and deceit. The economic support from the start consisted of massive public financing by

Brazil guaranteeing purchases by Cuba of Brazilian goods and services, with Cuba's growing exports of goods and services to Brazilian state entities, expected to provide the payback. Strong incentives by the Brazilian executive branch for investment and trade by Brazilian private enterprises in/with Cuba was also an intrinsic part of the strategy from early on.³

THE MARIEL PORT PROJECT

After a period of seeming uncertainty when Fidel Castro fell ill in July 2006 and took a temporary leave from power (later becoming permanent), the plan rolled forward. With Fidel's brother, Raúl,⁴ clearly in full control, in January 2008, Lula paid a visit to Cuba. He offered food assistance and said he was "ready to raise" up to US\$1 billion in credit lines "to help [Cuba] with its process of infrastructure renewal."⁵ In May of that year, Brazil's Foreign Minister said he wanted Brazil to become Cuba's number-one trading partner.⁶

1. Lula was President of Brazil from January 1, 2003 to January 1, 2011

2. Minister of Mines and Energy (1 January 2003—21 June 2005) and Chief of Staff to President Lula (21 June 2005—31 March 2010).

3. Anita Snow, "Brazil, Cuba Sign \$200m In Business Deals," Havana, *Associated Press*, September 27, 2003.

4. Raúl was from the earliest days of the revolution considered No. 2 after Fidel and served as Defense Minister.

5. Esteban Israel, "Lula extend credit to Cuba and meet Fidel," Havana, *Reuters*, January 15, 2008.

6. "Brazil wants to be Cuba's main trade partner," *NoticiasFinancieras* (Latin America), May 30, 2008. In: Daniel P. Erikson and Paul J. Wander, "Cuba's Brave New World," *The Fletcher Forum of World Affairs*, Vol.33:2 Summer/Fall 2009, pp. 12–13.

Also in 2008, a formal agreement was signed to develop the port of Mariel, located 45 kilometers (27 miles) west of Havana.⁷ The refurbishing/modernization of the port officially began in 2010. The first phase of the project was inaugurated on January 27, 2014.⁸ It consists of 702 meters of dock and four super post-Panamax cranes⁹ capable of handling a maximum capacity of 822,000 containers per year. Infrastructure upgrades (completed or underway) include storage facilities, railroads, channels, and bridges.^{10/11} PSA International of Singapore,¹² one of the largest port operators in the world, manages the facility.^{13/14} The builder is Brazilian company *Odebrecht*, through its independent subsidiary, *Companhia de Obras em Infraestrutura* (COI);¹⁵ the giant holding group is privately owned by one of Brazil's richest families and is one of the country's largest construction companies. Transshipment and repair for containers and other complementary services will be offered through 100% Cuban state-owned *Terminal de Contenedores del Mariel* (TCM), a subsidiary of the Cuban firm

Almacenes Universales S.A., which, in turn, belongs to the Cuban Armed Forces' holding company *Grupo de Administración Empresarial* (GAESA). TCM also uses the terminal and is "responsible for oversight of its efficient use."¹⁶

According to Cuban president Raúl Castro, Mariel is "the most complex project ever initiated in Cuba."¹⁷ It is a 10-year project valued at over 7 billion euros¹⁸ (most is not actually funded), and includes the Special Economic Development Zone of Mariel (*Zona Especial de Desarrollo Mariel*, referred to as ZEDM), already in construction. Encompassing 465 square kilometers (180 square miles) of land, Cuba is presenting it as "the Caribbean's most important cargo hub and center of light manufacture."¹⁹ High hopes are pinned on the project—it seeks to increase exports, create jobs,²⁰ promote import substitution, high technology and local development, and create

7. Eduardo Militão, "Cuba Não Revela Por Que Escolheu Odebrecht," 13/06/2014, <http://Congressoemfoco.Uol.Com.Br/Noticias/Cuba-Nao-Revela-Por-Que-Escolheu-Odebrecht/>

8. Diana Ferreira, "Reconocen labor de constructores en la culminación de la primera etapa de la Terminal de Contenedores del Mariel," www.granma.cu, 1 febrero 2014.

9. Post-Panamax cranes are capable of handling the larger ships that will be able to transit an expanded Panama canal.

10. "Nueva terminal del Mariel ha operado 57 barcos desde su apertura," *La Habana, EFE/El Nuevo Herald*, 9 julio 2014.

11. The railroad line connecting Mariel to Havana was inaugurated in July 2014 and, to date, is only being used to transport workers of the Mariel special zone. ("Cuba construye la primera línea de ferrocarril en 20 años para unir La Habana con Mariel," martinoticias.com, julio 04, 2014; "Comienza el tren La Habana-Mariel, pero sólo para empleados," 14YMEDIO, *La Habana, www.14ymedio.com*, Julio 25, 2014).

12. <http://www.internationalpsa.com/>

13. "Singapore's PSA to manage Cuba container terminal," Singapore, *Reuters*, July 8, 2011; Damien Cave, "Former Exit Port for a Wave of Cubans Hopes to Attract Global Shipping," *The New York Times*, January 27, 2014.

14. The huge multinational company, with revenues of \$4.6 billion in 2013, is involved in the management of over 20 ports around the world. "Singapore's PSA to manage..." op.cit.

15. "Cuba construye gigantesca terminal de contenedores," <http://www.americaeconomia.com>, 09/08/2013.

16. Given the lack of transparency surrounding the business conglomerate of the Cuban military, it is impossible to tell with precision the ZEDM's ownership structure. For example, an unconfirmed report from Cuba claims that a joint venture was formed between Odebrecht and Almacenes Universales S.A., of the GAESA group. (Polina Martínez Shvietsova, "Los dos Mariel: mega puerto y gueto," *La Habana, www.cubanet.org*, May 12, 2014.)

17. "Cuba construye gigantesca terminal de contenedores," Xinhua/americaeconomia.com, 08/09/2013.

18. Juan Jesús Aznarez, "Cuba apuesta por el puerto de Mariel," *El País*, 20 Abril 2014.

19. "Singapore's PSA to manage," op cit.;

20. Expectations of job generation are critical. In September 2010, Raúl Castro announced that one million workers would be laid off from the state-employed labor force and transitioned to the non-state sector in order to revive the economy. ("Cuba to cut one million public sector jobs," www.bbc.com, 14 September 2010.)

new sources of long-term financing for Cuba,²¹ to guarantee “a socialist and prosperous future.”²² Essentially, the government seeks to establish a maquiladora production center to manufacture products for import substitution and re-export. Merchandise distribution centers and manufacturing industrial parks are planned in diverse industry sectors including biotechnology, pharmaceuticals, chemicals, construction materials, alternative energy, and “all types of activities permitted by Cuban law.”²³

The ZEDM was created by Decree-Law 313 of September 2013 and, together with the regulatory framework and six resolutions, it took effect November 1, 2013.²⁴ It “is not a free-trade zone laying outside of Cuban customs.”²⁵ Rather, it is a special investment enterprise zone subject to a discrete regulatory scheme more favorable than found outside the zone and into which Cuba seeks to attract foreign investment, technological innovation and a concentration of industry.²⁶ It offers advantageous terms in several areas, namely customs duties and taxes, but maintains restrictive policies such as with respect to labor.²⁷ ZEDM users or concessionaires, however,

will not have property ownership, as it is not allowed by Cuba’s Communist Constitution,²⁸ and agreements are limited in time to 50 years maximum, although renewable.

Funding for the project is shrouded in a veil of secrecy. In 2012, all details of Brazil’s agreements involving Cuba (including acts, protocols, reports, technical notes and correspondence) were classified secret for thirty years by order of then-Minister for Development, Industry and Foreign Trade, and newly elected governor of Minas Gerais for the PT, Fernando Pimentel.²⁹ This is unprecedented since the end of the country’s military dictatorship (1964–1985) and shields from scrutiny loans to Cuba and Angola totaling \$6 billion, but justified “in observance of the legislation of the country of destination of the funding.”³⁰ Consequently, what is known has been pieced together from reports obtained by Brazilian Members of Congress and media coverage reporting statements by Brazilian and Cuban officials.

It appears that two sets of agreements to strengthen bilateral ties were signed by Lula and Raúl Castro in 2008 and 2010. The 2008 agreement called for

21. <http://www.zedmariel.com/>

22. Words of Raúl Castro at the inauguration ceremony of the port’s first phase. (In Nelson Acosta and Marc Frank, “Cuba opens new port built with Brazilian aid,” *Reuters*, January 27, 2014.)

23. Patricia Grogg, “Cuba Sees Its Future in Mariel Port, Hand in Hand with Brazil,” Havana, www.ipsnews.net, August 22, 2014 (IPS); “Nueva terminal del Mariel ha operado...,” op. cit.

24. For details of the law-decree see [http://www.zedmariel.com/DOCUM/Decreto-Ley%20No.%20313\(ING\).pdf](http://www.zedmariel.com/DOCUM/Decreto-Ley%20No.%20313(ING).pdf). Also see: “Mariel: 10 años de gracia a utilidades de inversores,” *Agencias*, www.martinoticias.com, septiembre 25, 2013; Jesús Bu Marcheco, “Cuba-Zona Especial de Desarrollo Mariel. 100 Preguntas y Respuestas,” <http://www.monografias.com>, posted October 14, 2013.

25. Luis M. Alcalde, “The Special Development Zone of Mariel,” *Kegler Brown Global Business News*, August 8, 2014, <http://www.keglerbrown.com/>.

26. Ibid.

27. Concessionaires and users will be exempt from the labor utilization tax, from taxes on profits for 10 years (taxed at 12% thereafter and at 50% for firms involved in the exploitation of natural resources), from customs duties for goods imported for processing and re-exporting, and from taxes on sales and services for the first year of operations (taxed at 1% thereafter). They will have to make the social security contribution for employees at the standard 14% and will contribute a percentage of their income to a Zone Development Fund, presently at 0.5% of gross revenues, payable quarterly. (<http://www.zedmariel.com>).

28. The sole exception is for the land legally owned by small farmers, who are required to exploit it. (See Art. 19, Constitution of the Republic of Cuba of 1976, as amended 1992.)

29. During Brazil’s military regime, a young Pimentel was reportedly part of the same militant group as Dilma Rousseff, the underground Marxist group *Comando de Libertação Nacional—COLINA* (National Liberation Command), said to have been involved in bank robberies, car thefts, two bombings, and the machine gun killing of two policemen during a raid. (http://en.wikipedia.org/wiki/Dilma_Rousseff).

30. Rolando Cartaya, “Cuestionan en Brasil créditos secretos a Cuba y Angola,” *martinoticias.com*, 17 de octubre de 2013, citing the president of Brazil’s development bank (BNDES) in Congress.

US\$600 million to finance the construction of the Port of Mariel, or 85% of the total project cost of US\$800 million, with Cuba covering the remaining 15%; the loans were to be disbursed over four years.³¹ Brazil's development bank, *Banco Nacional de Desenvolvimento Econômico y Social* (BNDES), granted the loans to the *Odebrecht* subsidiary, *Companhia de Obras e Infraestrutura* (COI).³² However, beginning in 2012, reports cite higher loan amounts than originally agreed to. In January 2014, a spokesman for *Odebrecht* indicated that BNDES provided US\$682 million "in favorable loans," and that "Brazilian companies had received US\$802 million in business for the construction of the port."³³ Brazilian official sources reported a total investment of US\$957 million, and President Rousseff confirmed financing of US\$802 million for the first phase.³⁴ A June 2014 report from Brazilian congressional sources seems to clarify the discrepancies. BNDES loans to *Odebrecht* totaled US\$692 million and PROEX, Brazil's Export Financing Program, granted export "equalization" credits of US\$107.8 million for exports to Cuba (apparently most to the *Odebrecht* group); this would bring total public funding roughly to the cited \$800–\$802 million. These credits were officially justified "to lower the interest rate of Brazilian banks to facilitate the importation by Cuba of goods and services from Brazilian companies."³⁵ The subsidy for exports

to Cuba was the third largest export support granted that year, after subsidies to much larger countries, the U.S. and Angola.³⁶ In January 2014, President Rousseff announced that Brazil would finance a second phase of the Mariel project for US\$290 million, consisting mostly of the construction of storage space in the special development zone.³⁷ When news of the additional loans surfaced in September 2013, Brazilian government sources indicated that the actual amount would depend on the number of Brazilian companies that established in the Mariel special zone, implying the financing would be granted to the firms directly, claiming that: "BNDES is not financing Cuba, but rather Brazilian companies who do business there."³⁸

Information on total financing granted by Brazil for projects in Cuba and for Brazilian exports to Cuba is not entirely clear. Reportedly, disbursed loans amounted to US\$1.37 million by 2012.³⁹ In addition to the Mariel port financing, BNDES has granted \$176 million in loans to *Odebrecht* to upgrade airport terminals in Havana, Santa Clara, Holguín, Cayo Coco and Cayo Largo.⁴⁰ Brazil has granted other loans as well: in January 2012 Brazil reportedly extended US\$200 million credit for Cuba "to import food and agricultural machinery and equipment" (presumably from Brazilian companies).⁴¹ In August

31. Eduardo Militão, "Ministerio confirma subvención gastado en Cuba," May 30, 2014 <http://CongressoEmFoco.uol.com.br/> (translated by the author from the Portuguese original).

32. "Cuba construye gigantesca terminal de contenedores," op. cit.

33. N. Acosta & M. Frank, op.cit.

34. Armando de Armas, "Cargamento de pollos de EE.UU inaugura puerto de Mariel," martinoticias.com, 3 de febrero de 2014.

35. Eduardo Militão, "Ministerio confirma...", op.cit.

36. Eduardo Militão, "Eua, Angola E Cuba Lideram Lista Do Proex," 30/5/2014, <http://CongressoEmFoco.uol.com.br>

37. "Nueva terminal del Mariel ha operado 57 barcos," op. cit.; A. de Armas, "Cargamento...", op. cit.; Rolando Cartaya, "Dilma Rousseff y Raúl Castro inauguran el megapuerto de Mariel el pasado lunes 27 de enero de 2014," martinoticias.com, 29 de enero de 2014.

38. "Raúl Castro busca un nuevo crédito brasileño para la zona franca del Mariel," Agencias, San Pablo, *Diario de Cuba*, 21 de noviembre de 2013.

39. Lisandra Paraguassu, "Longe de dissidentes, Dilma chega a Cuba com linha de crédito milionária," *Estadão*, 31/01/2012 <<http://internacional.estadao.com.br>>

40. Anthony Boadle, "Brasil ofrecería crédito de 176 mln dlr para modernizar aeropuertos de Cuba," *Reuters*, 6 de mayo de 2013; "Brazil to deploy 6,000 Cuban doctors in remote areas: minister," Brasilia, May 6, 2013.

41. "Brasil concede crédito de USD 200 millones a Cuba para programa alimentario," *Agence France Presse*, August 30, 2012; L. Paragaussu, op.cit.

2012, an additional US\$200 million loan was approved (to be disbursed in 2012 and 2013) “for exports of agricultural machinery and equipment to Cuba.”⁴² This would bring loans for food exports to US\$400 million by late 2012.⁴³ A credit for US\$70 million was reportedly granted by the International Food Program of the Ministry of Agrarian Development for the purchase of Brazilian agricultural products.⁴⁴ The Bank of Brazil also apparently disbursed \$221.2 million in 2013,⁴⁵ it not clear for what purpose. In January 2014, around US\$500 million was reportedly being offered in an annual line of credit for Cuba to buy Brazilian products and services.⁴⁶ The numbers are confusing, but in all cases, they are large and when combined, amount to a very large total.

WHAT JUSTIFIES BRAZIL’S MASSIVE LENDING?

Any objective due diligence would indicate that viability of the Port of Mariel project is questionable at best. The project is banked, at least in theory, on taking advantage of the expansion and deepening of the Panama Canal, to be completed in late 2015, which will double capacity and allow for larger vessels that

can carry almost three times the current load.⁴⁷ The new economies of scale in shipping will slash costs for Pacific-Atlantic routes, boost the 6% share of world trade the Panama canal now claims,⁴⁸ and change world trade routes/patterns and logistics that will impact many markets.⁴⁹ Few ports have the water depth needed to dock the post-Panamax ships,⁵⁰ so port facilities all over the world have been rushing to expand and upgrade their infrastructure.⁵¹ Because most of the loads shipped through the Panama Canal are in containers, the ports that can handle the larger ships will reap the most benefits: more cargo at the terminal, more jobs related to handling and distribution of the cargo, and other business.⁵² Ports lacking the required post-Panamax ship depth will require cargo to be unloaded onto smaller ships at “transshipment” hubs.

Mariel has been dredged to 18 meters to accommodate the largest ships but, according to *The Economist* and other reputable sources, several established ports in the vicinity of the Panama Canal and near Cuba are similarly or even better positioned than Mariel. Balboa, in Panama, is emerging as the Latin American leader of transshipment and expects to see its

42. Pablo Alfonso, “Brasil se asienta en Cuba mirando a Estados Unidos,” martinoticias.com, 11 de septiembre de 2012. (Loans were “for Cuba’s small farmers to import equipment and machinery,” yet only the Cuban state is allowed to import.)

43. “Financiamentos de exportações brasileiras para Cuba e Angola são questionados pela oposição no Brasil,” sexta-feira, 19 de abril de 2013.

44. Ibid.

45. Patrícia Campos Mello, “Brasil concede crédito de R\$ 1,2 bi para Cuba comprar bens nacionais,” *Folhapress*, 27/01/2014.

46. Ibid.

47. Currently, the Panama Canal can handle ships 965 feet long and a water depth of just over 12 meters (carrying around 4,400–5,000 containers), a vessel size known as Panamax. The \$5.25 billion canal expansion will allow transit of vessels 1,200 feet long with 50-foot draft, and carrying up to 12,600–13,000 containers. (Jim Wyss, Jacqueline Charles, and Mimi Whitefield, “Latin American ports ready for Panama Canal expansion,” *The Miami Herald*, November 23, 2012; “Ports prepare for Panamax ships,” *The Miami Herald*, October 4, 2013; *The Panama Canal expansion and its impact on world trade*, Edition 53—Port Focus, www.porttechnology.org; and “Caribbean ports and the Panama canal,” *The Economist*, February 28, 2014.)

48. “Caribbean ports...”, op.cit.

49. Many markets expect to benefit. For example, from the Atlantic side to Asian destinations, grains from the U.S. Midwest, soybeans from northern Brazil, and coal and iron ore from Colombia and Venezuela. (*The Panama Canal expansion*, op.cit.; K.C. Conway, “North American Port Analysis: Beyond Post-Panamax Basics to Logistics,” *Insider’s Perspective*, Vol. 37, No. 1, 2012. <http://www.cre.org/>).

50. In 2012, of 161 ports in South and Central America, only 21 had channels with draft of 50 feet or more, 13 in Brazil alone. (J. Wyss, op.cit.) Ports in Costa Rica, Peru, and Jamaica, also have expansion plans, although apparently delayed.

51. “Caribbean ports...”, *The Economist*, op.cit.

52. *The Panama Canal expansion*, op.cit.

business double after the canal expansion.⁵³ Another top contender is the Freeport Container Port on Grand Bahama, which is in the English-speaking Caribbean and has quick access to the eastern seaboard of the U.S.⁵⁴ At least four U.S. East Coast ports will be post-Panamax ready (PPR)—Miami,⁵⁵ Norfolk, Baltimore and New York⁵⁶—all have security advantages, such as controlling nuclear-radiation screening of U.S.-bound containers.⁵⁷ Ports in the U.S. Gulf Coast are also contending for the added business.

The U.S. embargo on Cuba gets in the way of Mariel becoming a major transshipment hub. U.S. commercial ships are not allowed to dock there and ships that have been to Cuba are barred for six months from all U.S. ports. Existing U.S. economic sanctions on Cuba are codified into law (the Cuban Liberty and Solidarity Act of 1996 or "Helms-Burton Law") and would be hard to repeal as long as the Cuban regime continues to repress fundamental freedoms. Expenditure of political capital on this issue seems unlikely in the face of other pressing foreign policy priorities.

Additional considerations don't bode well for Mariel. The decrepit state of Cuba's infrastructure is legendary and translates into electricity blackouts, power

shortages, poor public services, and deficient telecommunications and public transportation. Potential investors who toured the facilities in August 2014 told *Reuters* of "a paucity of infrastructure in and around the port" and the uncertainty regarding land and utility prices, which had yet to be established.⁵⁸ For example, the highway from Mariel to Havana (critical to the project) is in bad condition and not yet refurbished.⁵⁹ Where or how Cuba will obtain the funds for infrastructure modernization projects is unknown. Also, for Cuba to generate sufficient revenues to stay competitive, maintain the facilities and keep up with upgrades in technology, communications, and port management systems, it will have to charge sufficiently high fees and taxes. It's a competitive and tough market: in 2012, the 15 largest publicly traded container carriers lost \$700 million and in the six years to 2013, only three of them have been profitable.⁶⁰

Notwithstanding all of the above, Cuba has embarked on a huge international marketing campaign to sell the ZEDM. The frenzied search for foreign partners included media blitzes, globe-trotting delegations visiting from Beijing to London to Guatemala City,⁶¹ and large conferences and fairs in Cuba

53. J. Wyss, J. Charles, and M. Whitefield, op.cit.

54. Open since 1997, Freeport is already a major hub for worldwide transshipment of containerized cargo and is undergoing a US\$250 million upgrade. It can easily take the giant ships and is upgrading to nine post-Panamax cranes and one super-post-Panamax quay crane, has plenty of land for storage, a nearby airport, a state-of-the-art facility offering comprehensive services, proven port-management systems, leading-edge technology and communications, and a trained staff. It is just 100 miles from the port of Miami, at an excellent location for serving the Northeast U.S. (<http://freeportcontainerport.com/freeport-container-port/>).

55. The port of Miami is planning to complete in 2015 a \$2 billion dredging and investment expansion and will offer a direct connection to America's highway network.

56. West coast ports of LA/Long Beach, Oakland, and Seattle are post-Panamax ready. (K.C. Conway, op.cit.)

57. "Caribbean ports..." *The Economist*, op.cit.

58. Marc Frank, "Cuba struggles to attract investors despite reforms," Havana, *Reuters*, August 21, 2014.

59. "Cuba se abre a la inversión extranjera," www.prensalibre.com, 27/01/14; Moisés Leonardo Rodríguez, "Carretera Panamericana a Mariel está abandonada," www.CubaNet.org, 29 de septiembre de 2014.

60. "Ports prepare for Panamax ships," *The Miami Herald*, October 4, 2013.

61. "Cuba woos Chinese investment with special development zone," Beijing, Xinhua, September 25, 2013; "Desesperada por las inversiones extranjeras, Cuba promete que no expropiará," www.infobae.com, 27 de junio de 2014; "Cuba busca captar inversores en Guatemala," *Prensa Latina*, Guatemala, 4 de junio de 2014; Release on London conference "Cuba Initiative Business Conference: Cuba—New Opportunities for Investment and Business" at <http://www.caribbean-council.org/cuba-initiative-business-conference-monday-23rd-june/>.

with hundreds of businesspeople attending from many countries.⁶² Most major mainstream media sources have covered the story of the Mariel port expansion almost exclusively repeating the official line, with almost no critical examination of the project or of the Cuban government's prepared script.⁶³ Cuba does have a lot of experience and has invested huge resources influencing world media through conventional and, especially, covert means.⁶⁴ But, reality on the ground is a different story.

During the first six months of operation (since January 2014), the Mariel terminal received only 57 ships and some 15,000 containers—small numbers compared to other ports and to the terminal warehouse's capacity of 822,000 containers.⁶⁵ In March 2014, independent sources in Cuba reported insufficient funds to pay overdue salaries and the suspension of “stimulus” funds promised to port workers payable in convertible pesos (CUC), which immediately reduced monthly wages by almost half. Workers were reportedly so dissatisfied that they were purposefully reducing their workload and many were looking for alternative jobs.⁶⁶ By mid-2014, the 100% Cuban state-owned *Terminal de Contenedores* was the only

enterprise operating in Mariel, providing services for the ships calling on the port. But Cuba was reporting 23 viable projects (presumably approved) that could be established by year-end and 20 projects “being assessed.”⁶⁷ Interested investors were reported to be from Spain, France, Italy, Germany, Brazil, Holland, China and Russia, and most had existing business ties with Cuba.⁶⁸ Areas of interest included biotechnology and pharmaceuticals, automotive, heavy industry, packaging, agricultural-food, logistics, chemical, construction materials, prosthetics, and equipment rental industries.⁶⁹ Twenty-five investment projects had been received just in biopharmaceuticals.⁷⁰ In late September 2014 it was announced that the German company *Orthop*, producer of orthopedic equipment and prostheses, would set up a manufacturing facility in the special zone, the investment amount and date unknown.⁷¹ Several Brazilian business ventures in the ZEDM have also been announced, but it is not clear that they have actually been launched.

- In September 2012, *Fanavid* S.A had reportedly committed to establishing a plant with a US\$220 million credit from Brazil's Agency for

62. In June 2014, Havana hosted the First Industrial Convention and International Expo 2014, with twelve subsidiary events specializing in diverse sectors and products; 400 foreign business people from 29 countries were said to be in attendance. (“El Gobierno promete ‘fuertes alianzas’ a los empresarios extranjeros que inviertan en su industria,” *Agencias*, La Habana, www.diariodecuba.com, June 24, 2014; Ernesto García Díaz, “Inauguran a puertas cerradas feria internacional de comercio,” www.CubaNet.org, 25 de junio de 2014; “En busca de más ofertas en los electrodomésticos,” *EFE/El Nuevo Herald*, 20 de junio de 2014.)

63. There are many examples, including: “How Cuba's gleaming new port and a lucrative free trade zone point to a future after the US trade embargo is lifted,” *PRI's The World*, www.pri.org, January 30, 2014. For other examples, see: David Greene and Jasmine Garsd, “Cuba's Mariel Port: Once an Escape, Now a Window to the Future,” *Morning Edition, NPR*, June 25, 2014; Jonathan Watts, “Welcome to Mariel, Cuba—the new port giving berth to hope,” www.theguardian.com, January 19, 2014.

64. See, for example, “Cuba: Castro's Propaganda Apparatus and Foreign Policy,” Central Intelligence Agency, 1984 (Restricted—Approved for release July 2003) and Yoani Sánchez, “Island in the Storm: How Cuba's network of independent and citizen journalists keeps the country informed,” *Nieman Reports*, September 11, 2014.

65. P. Grogg, *op. cit.*

66. Moisés Leonardo Rodríguez, “Bajan salario a trabajadores de la Terminal de Contenedores de Mariel,” *Artemisa*, Cuba, www.CubaNet.org, 27 de marzo de 2014.

67. “Cuba confirma...” *op.cit.*

68. Marc Frank, “Cuba hopes for more investment as Chinese president arrives,” *Havana, Reuters*, July 21, 2014.

69. “Inversionistas de cara al Mariel,” www.granma.cu, 6 de mayo de 2014; P. Grogg, *op.cit.*

70. “La industria biofarmacéutica ha recibido 25 propuestas de inversión extranjera, dicen funcionarios,” *Diario de Cuba*, La Habana, 5 de julio de 2014.

71. “Empresa alemana de prótesis y aparatos ortopédicos se instala en Cuba,” *Diario de Cuba*, Sancti Spiritus, 26 de septiembre de 2014.

the Promotion of Exports and Investments, Apex-Brasil, to produce architectural glass for the Cuban, Brazilian and Caribbean markets. Two years later, no further news has surfaced.

- The Brazilian bus manufacturer, *Marcopolo S.A.*, was said to be interested in establishing an assembly plant,⁷² but specifics are lacking.
- *Odebrecht* subsidiary *Companhia de Obras e Infraestrutura* (COI) apparently signed a Memorandum of Understanding to form a joint venture in biotechnology with a Cuban state entity at the ZEDM to develop and produce monoclonal antibodies for anti-cancer vaccines, with Brazilians contributing the capital and Cuba the technology, however, it was reported that the deal did not move forward.⁷³
- *Odebrecht* was also considering a deal to export to Brazil Heberprot-P, a Cuban pharmaceutical product to treat foot ulcers,⁷⁴ but actual investment figures are unknown.

Although the Mariel special zone offers, according to several experts, comparable incentives to other economic development zones, Cuba is one of the riskiest business environments in the world. Plus, its small, devastated, vulnerable, and parasitic economy can offer little real opportunities to a country like Brazil. *The Economist Intelligence Unit* ranks Cuba one of

the worst countries for doing business (of the 82 countries evaluated, Cuba held 79th place in 2009–2013, with only Libya, Angola, and Iran faring worse.)⁷⁵ For its part, the 2014 Index of Economic Freedom, produced by *Heritage Foundation/The Wall Street Journal*, ranks Cuba's economy No. 177 of the 178 countries evaluated, only ahead of North Korea.⁷⁶ Its dependence on external aid is almost as long as the history of the revolutionary regime. Until 1989–90, the Soviets subsidized Cuba to the tune of many billions a year.⁷⁷ When the USSR broke up and the aid ceased, a decade of virtual economic collapse followed. But, Hugo Chávez attained the presidency of oil-rich Venezuela and began supporting the parasite state. In May 2014, Venezuela was subsidizing Cuba to the tune of an estimated US\$8 billion annually (\$4.5 billion in oil and \$3.5 billion for professional services, both at very advantageous terms). Experts estimate that 20% of Cuba's GDP, some US\$9 billion, depended on Venezuela. This is a very risky proposition given the precarious political and economic situation in Venezuela.⁷⁸

Cuba is not creditworthy by any standard measure. Having amassed US\$75 billion in unpaid obligations,⁷⁹ its failure to honor its external obligations is legendary. It has been shut out of international credit markets since 1986 for defaulting on US\$10.5 bil-

72. "Empresa brasileña planea ensamblar automotores en Mariel," www.martinoticias.com, 4 de septiembre de 2013.

73. The deal was signed in Havana by the chief of Cuban operations for Odebrecht's subsidiary, *Companhia de Obras e Infraestrutura* (COI), and Agustín Lage, director of Cuba's Centro de Inmunología Molecular (CIM). (See: "Odebrecht invertirá con Cuba vacunas contra el cáncer," www.martinoticias.com/ 29 de enero de 2014; Lisandra Fariñas Acosta, "Programa más médicos para Brasil: símbolo de integración y humanismo," www.granma.cu, 28 de enero de 2014; "Governo atua como lobista para levar farmas brasileiras a Cuba," *Veja*, 16/06/2014.)

74. "Prevé Brasil instalar fábrica de vidrios en Cuba," *Tribuna de La Habana*, 31 de octubre de 2012.

75. "Business Environment Rankings," *The Economist Intelligence Unit*, 2014, http://www.iberglobal.com/files/business_climate_eiu.pdf

76. <http://www.heritage.org/index/ranking>.

77. In the last years of Soviet Communism, Cuba is said to have been receiving Soviet aid of up to \$6.7 billion a year; over three decades, the worth of aid from the Soviet bloc to Cuba totaled \$100 to \$150 billion in addition to at least \$1.2 billion a year in military assistance. (Maria C. Werlau, "Foreign Investment In Cuba: The Limits of Commercial Engagement," *World Affairs*, Vol. 160, No. 7, Fall 1997.)

78. See: Carmen Muñoz, "Cuba teme la bancarrota sin el petróleo 'regalado' de Venezuela," ABC Internacional, Madrid, May 11, 2014. (Venezuela sends Cuba approximately 80,000 to 100,000 barrels of oil daily in very advantageous terms and overpays Cuba for the service of its 40,000 medical and other professionals in Venezuela.)

79. Mary O'Grady, "Brazil Tries to Borrow Its Way to Prosperity," *The Wall Street Journal*, February 9, 2014.

lion in credits from Western financial institutions (Paris Club).⁸⁰ Numerous governments and private creditors (financial and commercial) as well as investors from the world round fill the large and growing roster of Cuba's defaults and write-offs.⁸¹ Finally, Cuba does not belong to multilateral financial institutions such as the International Monetary Fund (IMF) and World Bank, as its membership is blocked by the United States embargo. Moreover, prospects for improvement are elusive. Cuba's military government continues to insist on socialist centrally-planning moored to a Communist Constitution, despite the proven worldwide failure of this model in generating sustainable growth and material prosperity.

In recent years, Cuba has made some important, yet limited, market-oriented changes (a process it calls "updating socialism"), but it is an ideologically incongruent attempt to consolidate a new model that abandons strict Communist ideology and orthodoxy for captive state capitalism under the same ruling elite.⁸² The government has explained these are not "reforms," but administrative steps to "abolish restrictions" in order "to increase efficiency and reduce government expenses and corruption."⁸³ They make it clear that the "updating" process is "anchored in

social property and not private enterprise."⁸⁴ The priority is to preserve power at all costs. The result is evident in the continuing and widespread decay and the sober projections by Cuban officials.⁸⁵ *Reuters* reported that even China, Cuba's political ally and second trade partner, has refrained from investing in Cuba.⁸⁶

Cuba, it is widely recognized, presents high political risks. Socio-political upheaval could represent substantial losses to investors. Plus, to date, all foreign investors have been required to enter into partnerships—joint ventures—with the Cuban state that require majority share for Cuba even when 100% investment by foreigners has been allowed since 1995. This means that if expected revenues are not delivered, or government objectives change, the majority partner "may arbitrarily terminate the agreements."⁸⁷ Furthermore, because Cuba is a dictatorship accused of crimes against humanity,⁸⁸ a future democratic government could declare a review of investment agreements. But, even assuming political status quo and "stability," the current foreign investment regime is direly deficient in comparison to most developing countries' and poses higher risks than most everywhere.

80. The Paris Club is an informal group of official creditors from the world's largest economies that coordinates and finds solutions for payment difficulties of debtor countries. (<http://www.clubdeparis.org/>)

81. Following are a few recent debt fiascos: In December 2013, after 20 years of collection efforts, Russia wrote off 90% of Cuba's US\$32 billion (\$20 billion plus interest) in exchange for Cuba paying just \$3.2 billion over ten years. In November 2013, Mexico forgave 70% percent of a 15-year-old US\$487 million debt of its development bank in exchange for payment of the remaining 30% (\$146 million) over 10 years. In 2012 Japanese commercial creditors forgave 80% of a longstanding US\$1.4 billion (130 billion yen) debt, the remainder payable over 20 years. ("México condona 70% de deuda a Cuba," Ciudad de México, *Reuters*, 1 de noviembre de 2013; Marc Frank, "Exclusive: Russia signs deal to forgive \$29 billion of Cuba's Soviet-era debt," Havana, *Reuters*, December 9, 2013.)

82. See Maria C. Werlau, "¿Hacia dónde van las reformas?" *Cuba in Transition—Volume 23*, Washington, D.C., Association for the Study of the Cuban Economy, 2013, www.ascecuba.org.

83. Citing Marino Murillo, Vicepresidente del Consejo de Ministros encargado de las reformas. ("Cuba anuncia una nueva fase de reformas económicas," *El País*, 10 de julio de 2013.) Translation from Spanish by the author.

84. *Ibid.*

85. The Minister for the Economy announced that growth projections of 2.2% for 2014 were lowered to 1.4% due to "internal insufficiencies" and adverse climatic conditions. ("Desesperada por las inversiones extranjeras, Cuba promete que no expropiará," www.infobae.com, 27 junio 2014.)

86. China has not moved forward with large announced investment agreements. Little of the \$80 billion China has invested in Latin America in recent years has gone to Cuba. (Marc Frank, "Cuba hopes for more investment as Chinese president arrives," Havana, *Reuters*, July 21, 2014.)

87. José Azel, "Investors Beware," *Focus on Cuba*, Issue 211, March 10, 2014.

88. See, for example, www.CubaArchive.org on deaths and disappearances attributed to the Castro regime.

The new Foreign Investment Law, which went into effect in June 2014,⁸⁹ will apply to investments in the ZEDM to the extent there is no conflict with its specific law and will always apply if it is more beneficial to the investor.⁹⁰ As previously, it promises investors full judicial protection and just compensation in the event of expropriation. Yet, as a risk analyst has explained, it "will not improve a generally poor contractual risk environment."⁹¹ While offering similar mechanisms for conflict resolution as in the past (as agreed to by the parties when establishing the investment entity), it requires jurisdiction in Cuba; in all cases conflicts "must be seen by the corresponding provincial tribunal." This will avoid the inconvenient matter of an international arbitration going against Cuba's interests, which has occurred.^{92/93} Bilateral investment treaties (BITs) will not protect investors; Cuba has those with over forty countries, yet investments from countries "protected" by these agreements have been unilaterally revoked, the investors suffering uncompensated losses.⁹⁴ Foreign investors are, thus, at the mercy of a one-party system that subordinates the courts, which lack procedural guaran-

tees, to the political power. Examples abound in the last twenty years of investment agreements terminated by the Cuban government essentially at will, without due process or adequate compensation. Some foreign executives have been jailed over corruption allegations many believe are just an excuse for confiscation.⁹⁵ Although a streamlined approval process is promised for the ZEDM, payoffs, wining and dining and/or giving gifts to prospective Cuban partners have been considered "an unavoidable cost of doing business in Cuba."⁹⁶ Rampant official corruption presents a catch-22 for investors that increases costs and adds huge legal risks. Other capricious government decisions are notable, such as in 2009, when the government faced a liquidity crisis and froze all hard currency bank accounts for more than a year, after which account holders were offered access to the frozen funds over a five-year period. This all considerably limits exit strategy and restricts the liquidity of the investments.⁹⁷

Cuba also presents exceptional constraints affecting investors' profitability and efficiency. Sales to the local market are restricted and may only take place by

89. Law No. 118, approved March 2014, replaced Foreign Investment Law, No. 77 of 1995.

90. Luis M. Alcalde, "Cuba's New Foreign Investment Law," *Keogler Brown Global Business News*, <http://www.keoglerbrown.com/>, August 8, 2014.

91. Michael Moran, "Cuba says 'investors welcome,' but the investors aren't buying," *New York*, www.globalpost.com, April 17, 2014.

92. To cite one such example, in July 2013, the Chamber of International Commerce in Paris ruled that Cuba had acted in bad faith in the liquidation of the Panamanian firm INGELCO, former partner with Cuban state enterprise Corporación Alimentaria in the joint venture Alimentos Río Zaza S.A. It awarded INGELCO US\$17 million plus \$500,000 for arbitration costs. (Miguel Fernández Díaz, "Inversión extranjera y solución de conflictos en Cuba—documento rescatado del caso Marambio," *Café Fuerte*, 28 de junio de 2014.) The case is popularly known as the Marambio affair, as INGELCO was owned by a Chilean investor group led by Chilean citizen Max Marambio, an intelligence officer for Cuba who had been very close to the Castro brothers.

93. Cuba is not a member of the International Center for Settlement of Investment Disputes (ICSID), the leading international arbitration institution devoted to investor-state dispute settlement, and has not signed the Convention of similar name, a multilateral treaty with over 140 member states. (<https://icsid.worldbank.org/>.)

94. The Marambio case mentioned above involved a Panama-based company owned by a Chilean investor group. Both Panama and Chile have longstanding BITs with Cuba.

95. See, for example, "Cuba Hands Canadian Businessman 15-Year Sentence," *The Associated Press/The New York Times*, September 27, 2014; Peter Kent, PC MP, Thornhill, "Cuba Is Open For Business That Might Land You in Jail," *Huffington Post*, April 29, 2014; Steven Purvis, "Foreign investment in Cuba: The risk of doing business," (Letter), *The Economist*, Aug 13, 2013.

96. "Canadian's 15-year sentence in Cuba a 'travesty of justice,' MP says," *The Globe and Mail*, September 29, 2014.

97. John Kavulich, senior policy advisor for the U.S.-Cuba Trade and Economic Council, explains: "There are many countries throughout the world that are far more transparent and have a less hostage-like relationship with cooperating partners. ... when the government feels that they've made enough progress, they reverse course and try to take back or eliminate the opportunities that they've presented to companies." ("Tread carefully in Cuba's 'open' economy: Experts," *CNBC.com*, March 28, 2014.)

negotiating contracts with Cuban state entities. Likewise, the local economy cannot supply inputs or credits. Plus, after twenty years of opening to foreign capital, investors report a culture of self-responsibility and managerial efficiency is lacking, and management, auditing, and accounting practices by the Cuban partner are wanting. One particular restriction is that workers may not be hired directly and a state employment agency must supply pre-screened personnel, posing a number of unsavory consequences for investors. First, the Cuban state has charged the foreign entity around \$500 a month per worker in hard currency, bringing the hourly rate to around \$2.98, which is much higher than in most emerging countries offering cheap labor for light manufacturing.⁹⁸ The Cuban state agency then pays the workers in Cuban pesos⁹⁹ and pockets the majority of the salary.¹⁰⁰ A special exchange rate has been established for Mariel special zone employees that is somewhat more “favorable,”¹⁰¹ but it means that the actual take-home pay of ZEDM workers will be 22–27% of the wages paid by the foreign enterprise—although much better than workers in regular foreign ventures (who get less than 10%), it is still predatory.¹⁰² Because the workers receive an average of only around 12 cents an hour (the average monthly salary is less

than US\$20 or 471 Cuban pesos),¹⁰³ to keep them motivated, foreign firms must offer direct incentives such as bonuses, gifts, transportation, and meals. Finally, theft is ingrained in the local culture of survival. This all increases the already uncompetitive cost of labor. Moreover, hiring by the state employment agency is subject to patronage, cronyism, and screening for political-ideological reasons, which distorts the hiring criteria.

While Cuba may offer a more submissive, well-educated, and/or harder working labor force that is attractive to investors, it also poses greater human/labor rights risks with real practical and legal implications. Cuba has been condemned by the International Labor Organization (ILO) for systematic violations of labor rights, as embodied in international conventions to which Cuba is party. The Mariel Port project has been specifically criticized for labor violations.¹⁰⁴ Investors know they will, at best, face negative international public opinion; at best they could be subject to potential lawsuits. The threat is real, there is already one precedent with eerie consequences—in 2008, three Cuban shipyard hands who had been sent to work at the Curacao Dry Dock Company in payment of a Cuban government

98. The average hourly wage for garment workers is: Bangladesh \$0.24, Cambodia \$0.45, Pakistan \$0.52, Vietnam \$0.53, China \$1.26. (Tweet of May 17, 2013 by Eurasia Group President Ian Bremmer in businessinsider.com).

99. Cuban pesos cannot buy minimal food or goods and the effective exchange rate is 25 CUP (Cuban pesos) to 1 CUC (Cuban convertible pesos). People are forced to shop at hard-currency stores operated by Cuba’s military monopoly at CUC prices or exchange the pesos at government exchange houses at a 25 to 1 exchange rate.

100. In Cuba’s dual currency system, the foreign employer must pay the employment firm the workers’ wages in convertible pesos (CUC), equivalent to hard currency, with the employment firm then paying the workers in non-convertible Cuban pesos (CUP), equalized to what workers in state enterprises earn for equivalent or similar jobs.

101. As per Resolution 14 of 2014 of the Ministry of Labor and Social Security, this will allow 80% of the salaries of ZEDM workers to be paid in regular Cuban pesos (CUP) at the “special” rate of 1 CUC to 10 CUP, although it will be subject to revision on the first quarter of each year. (See “Income Tax Established for Workers at Mariel Special Development Zone,” web@radiorebelde.icrt.cu, May 8, 2014.)

102. Cuban workers will reportedly receive 27% of what the state employment entity gets paid for their work after a 5% is withheld for income tax. (Pedro Campos, “Cuba’s Mariel Development Zone Unmasked,” *Havana Times*, April 18, 2014.) It is not clear if a social security contribution required by law of 1%-5% will also be withheld.

103. “Salario medio estatal en Cuba aumenta 1%,” *La Habana, El Universal*, 17 de junio de 2014.

104. An independent journalist from Cuba writes: “The much publicized Mariel project thus takes off its “progressive” mask ... to reveal itself as the extortionist of Cuban wage workers. It is a clear illustration of the sought-after alliance between Cuba’s state monopoly capitalism (which has sought to pass itself off as “socialism”) and international capital, coming together to jointly exploit Cuba’s workforce.” (P. Campos, “Cuba’s Mariel...”, op.cit. See similar critiques in: Leonardo Calvo Cárdenas, “El Mariel: otra burla para los trabajadores cubanos,” *La Habana*, www.CubaNet.org, January 27, 2014; P. Martínez Shvietsova, “Los dos Mariel...”, op.cit.)

debt were awarded US\$80 million by a Florida tribunal for bondage and exploitation.¹⁰⁵

It is in this unreliable environment that the Cuban government has declared that attracting a minimum of US\$2 to US\$2.5 billion per year is critical for the economy to "take off."¹⁰⁶ It seems highly doubtful they will succeed. Omar Everleny Pérez, a Cuban economist expert in foreign investment, estimates that in the last two decades Cuba has only managed to bring in \$5 billion in investments.¹⁰⁷

All of the above should not surprise Brazilian development bank and export promotion executives and analysts who looked at the Cuba projects. The fact is that, as we have seen, Cuba does not meet basic standards of creditworthiness and the Cuba loans cannot be explained with standard projections of repayment. Yet, Brazilian authorities could not be more eager to fund Cuba. At the Mariel port's inauguration in January 2014, standing next to General Raúl Castro, Dilma Rousseff declared: "Brazil believes in, and is betting on, the human and economic potential of Cuba. ... Brazil wants to become Cuba's main partner."¹⁰⁸ The director general of APEX-Brazil declared: "Cuba is a priority for our government and Brazil is important to Havana. ... Between our countries there is affinity, political will, and an interest in integration, but business matters are also important..."¹⁰⁹ Coincidentally, APEX-Brazil was created

by Lula with the intention of promoting joint business ventures with Cuba, the rest of the Caribbean and Central America.¹¹⁰

How much business could Cuba realistically generate for Brazil? According to a release from the Brazilian Ministry of Foreign Affairs, trade between the two nations grew more than seven times between 2003 and 2012, and from 2010 to 2012 Brazilian exports to the Caribbean island increased by 36.9%.¹¹¹ By 2011, Brazil had reportedly become the first food exporter to Cuba and the second importer of Cuban pharmaceutical and biotechnology products.¹¹² But these statistics require a closer look. In fact, the vast majority of Brazil's exports to Cuba (US\$528 million in 2011, \$568 million in 2012),¹¹³ were food products (in 2012, at least \$378 million was food and \$25 million was agricultural machinery),¹¹⁴ a large portion of which appears to have been made possible with loans from the government of Brazil if not donated as humanitarian assistance. Regarding other exports, a spokesman for *Odebrecht* claimed that the government's US\$802 million support for the construction of the port had generated 153,000 jobs in Brazil and that around 400 Brazilian companies were taking part in the project.¹¹⁵ None of these claims were backed with any details. Meanwhile, at the height of the Port of Mariel construction, the largest export after food was cement, which amounted to

105. "Curacao Dry Dock Paralyzed, Country Seriously At Risk Of Being Held Liable," Willemstad, Curacao Chronicle (<http://curacaochronicle.com>), December 16, 2013; Colin Woodard, "US Case Highlights Cuban 'slaves' in Curaçao," Willemstad, Netherlands Antilles, *The Christian Science Monitor*, November 18, 2008; "Slave-labour victims seek to seize firm's assets in s'pore," *The Straits Times*, December 23, 2013.

106. "Cuba en busca de más de 2 mil millones de dólares," Agencias, www.martinoticias.com, 9 de mayo de 2014; Marc Frank, "Cuba struggles to attract investors despite reforms," Havana, Reuters, August 21, 2014.

107. Marc Frank, "Cuba struggles...", op.cit; "Empresas brasileñas buscan establecerse en Cuba," *AFP/El Nuevo Herald*, November 1, 2012.

108. A. de Armas, "Cargamento...", op.cit; N. Acosta & M. Frank, op.cit.

109. P. Grogg, op.cit.

110. Ibid.

111. "Brazil, Cuba Analyze Bilateral Ties," Brasilia, *Prensa Latina*, 6 de mayo de 2013.

112. Pablo Alfonso, "Brasil se asienta en Cuba mirando a Estados Unidos," www.martinoticias.com, 11 de septiembre de 2012.

113. Exportacao Brasileira: Cuba—Principais Produtos, 2013–2012, Ministerio do Desenvolvimento, Industria e Comercio Exterior.

114. Brazil exports to Cuba 2012, The Observatory of Economic Complexity, atlas.media.mit.edu.

115. Ibid.

US\$11.3 million in 2010, US\$15 million in 2011, and \$18.3 million in 2012, but declined to \$1.3 million in 2013.¹¹⁶ Plus, US\$568 million in exports to Cuba in 2012 would represent a minuscule 0.23% of Brazil's total exports (US\$247 billion) and it has not been explained how Brazilian exports to Cuba can be sustained in the absence of massive Brazilian public funding, particularly now that the first phase of port construction has been completed. In 2010, however, *Odebrecht's* subsidiary *Companhia de Obras e Infraestrutura* (COI), secured a 10-year US\$60 million contract to manage the Sugar Mill “5 de septiembre” in Cienfuegos.¹¹⁷

Cuban economist Pedro Monreal declared in the media that the lower shipping costs from an expanded Mariel port “will improve the competitiveness of Brazil's manufactured goods,” and the ZEDM “could become a platform for production and export by the companies, even for supplying Brazil's domestic market.”¹¹⁸ But, why would Brazil, with its own ports and industrial development, need Cuba? In a post-Panamax world, the Brazilian ports should be preparing for the changes and opportunities. Yet, according to the Brazilian weekly magazine *Veja*, by the start of 2014, BNDES had made transfers to Cuba equivalent to three times what it had allocated to improvements and expansions at the Port of Suape, in Recife, since its inauguration in 1983. The newspaper *Correio Braziliense*, for its part, reported that of

the US\$218 million that had been programmed for Brazilian ports in 2013, only \$15.5 million (or 7%) had been spent.¹¹⁹ Meanwhile, the effects on the Brazilian economy of ballooning public lending for overseas projects is at issue. *The Wall Street Journal's* Mary O'Grady has reported that BNDES lending has grown hugely since 2008. She warns that, as interest rates rise, higher debt servicing will widen Brazil's fiscal deficit, slowing growth and weighing on business. The current deficit of US\$828 billion stands at 4% of GDP.¹²⁰ Then, of course, there is “the question of quality in what is a highly politicized loan portfolio” with expected default rates of 30–50%.¹²¹

The extensive lending for Cuba seems reckless from any sound business perspective. On top of that, Brazil has also sent direct humanitarian assistance to Cuba. The aid includes a March 2010 trilateral agreement for Brazil to donate US\$80 million and Cuba to be the provider of medical services and staff training in Haiti.¹²² In December 2012, Brazil donated to Cuba 25,000 metric tons of rice “to support food-based social protection programmes across Cuba.”¹²³ These “excellent” relations¹²⁴ only seem understandable from the perspective of a longstanding political-ideological alliance. Former Brazilian President Lula da Silva, a man of the hard left, has had sympathies for the Cuban revolution since his youth, visiting Cuba many times, first as a trade unionist, then as

116. Exportacao Brasileira, op.cit.

117. In November 2010, a management contract was established between Empresa Azucarera Cienfuegos (EAC) and the Brazilian Odebrecht subsidiary, Compañía de Obras e Infraestrutura (COI), apparently in a joint venture for ten years for US\$60 million. (Os-mar Laffita Rojas, “Brasil a la conquista del azúcar cubano,” *La Habana*, www.cubanet.org, November 19, 2012.)

118. P. Grogg, op.cit.

119. Rolando Cartaya, “Dilma Rousseff y Raúl Castro inauguran el megapuerto de Mariel el pasado lunes 27 de enero de 2014,” *martinoticias.com*, 29 de enero de 2014.

120. Figures for the 12-month period through August. See: Paulo Trevisani, “Brazil Posts Largest Deficit in Almost Five Years,” *The Wall Street Journal*, September 30, 2014.

121. BNDES lending grew by 52% in 2009, 9% in 2010, 15% in 2011 and 18% in 2012. (M. O'Grady, op.cit.)

122. Elizabeth Newhouse and Wayne Smith, “Cuban Public Health Cooperation in Haiti,” Report on Conference at University of California's Washington Center, Washington D.C., April 21, 2010.

123. Words of Cuban President Raúl Castro, in “Brazilian Donated Rice Arrives in Cuba,” December 19, 2012, <http://www.trust.org/>

124. Raul Castro's reported remarks. (“Mariel expansion ready in 2014,” *Cuba Standard*, 3/10/2011.)

political party leader,¹²⁵ four times as president, and continuing afterwards.¹²⁶ Fidel Castro has written at length on his tight relationship with Lula and of Lula's loyalty to the revolution.¹²⁷ If Brazil's weekly magazine *Veja* is right, his debt of gratitude is also material; former workers of his 2002 campaign have claimed that Lula received between US\$1.4 to US\$3 million from Cuba to finance his election to the presidency.¹²⁸ When Lula was leader of the leftist P.T., he co-founded with Fidel Castro the coalition Foro de Sao Paulo¹²⁹ to rethink the left's way to power after the demise of the Soviet Union. Jorge Hernández Fonseca, a political analyst and director of the digital journal CubaLibreDigital.com, Brazilian resident since 1992, claims that Lula set the course for his successor to steer Brazil into the Castro-Chávez orbit and their 21st century socialism ideology.¹³⁰ If there is

any doubt, Fidel Castro seems to confirm it; he has written that in 2008 Lula told him "he felt proud for what was going on in Latin America and once again reaffirmed that it was here in Havana that we decided to create the Sao Paulo Forum and unite all the Latin American left-wing, which is taking power in almost every country."¹³¹ Fidel explains that Lula believed that Brazil, the richest country in the region, had the responsibility to help the others.¹³² The shared Foro legacy, writes Fidel, has paved the way for Latin American integration "against capitalism, imperialism and neoliberalism."¹³³ It is behind the inter-American integration project of the ALBA¹³⁴ (Bolivarian Alliance of the Americas) that has embarked on a radical process of revolution—"21st century socialism"—opposed to the U.S. and the free market system.¹³⁵ Lula's political support for Cuba and his

125. P. Grogg, *op.cit.*

126. "Raúl Castro y Lula visitaron las obras de ampliación del puerto de Mariel," *La Habana*, EFE, 31 de enero de 2013.

127. See Fidel Castro Ruz, "Lula," *Reflexiones del Comandante en Jefe*, Primera a Cuarta Partes, enero 22 -31 de 2008. <http://www.granma.cu/granmad/secciones/reflexiones/esp-072.html>

128. "Escándalo por lazos con Fidel fortalece a la oposición en Brasil," *EFE*, 31 de octubre de 2005.

129. The Foro de Sao Paulo held its first meeting in the city of São Paulo in July 1990 and holds annual meetings of communist and other radical terrorist and political organizations from Latin America, Europe, and the Middle East to reportedly coordinates political activities around the world and against the United States. The Foro proposes a revolutionary agenda that at first uses the democratic process through the existing legal and electoral framework, to then gradually dismantle bourgeois institutions including the free press. ("Cuba's Foreign Policy in Latin America," *Focus Cuba*, Cuba Transition Project, Institute for Cuban and Cuban-American Studies, Staff Report, University of Miami, Issue 51, January 22, 2004; Constantine C. Menges, "Blocking a New Axis of Evil," *The Washington Times*, August 7, 2002; and <http://forodesaopaulo.org/brief-history-of-the-sao-paulo-forum/>.)

130. Fonseca explains that Lula, of the extreme left, had lost three previous presidential elections, so his campaign advisors convinced him to put forth a "Letter-Manifesto to the Brazilian People" promising to maintain the economic system if elected and also made a pact with the business community, naming an international banker Central Bank President. But, Lula's main advisor and Chief of Staff, José Dirceu, who was very close to Cuba, was to be the presidential candidate after Lula and had been designated to steer Brazil to the hard left and solidify the alliance with Cuba. Dirceu, however, was involved in a massive corruption scandal and found guilty in 2012, sentenced to seven years of prison. Dilma Rousseff, who succeeded Dirceu as Lula's Chief of Staff, was then chosen to be Lula's successor. (Jorge Hernández Fonseca, "El Decepcionante Proceder de Lula Da Silva: Un Análisis", *Cubalibredigital.com*, 14 de marzo de 2010. Also see "Condenado por corrupción José Dirceu, el más poderoso ministro de Lula y amigo de los Castro," *Diario de Cuba*, 10-10-2012.)

131. Fidel Castro Ruz, "Lula da Silva," *Cuban Agency News*, January 25, 2008. www.voltairenet.org.

132. *Ibid.*

133. "En Bolivia destacan legado de Fidel Castro y Lula para Foro de Sao Paulo," *La Paz, Prensa Latina/www.granma.cu*, 28 de agosto de 2014.

134. ALBA is the Spanish acronym for the Bolivarian Alliance for the Peoples of Our America. Members states: Antigua & Barbuda, Bolivia, Cuba, Dominica, Ecuador, Nicaragua, St. Lucia, Venezuela, St. Vincent & The Grenadines. See <http://www.alianzabolivariana.org/>

135. See Joel D. Hirst, "A Guide to ALBA: What is the Bolivarian Alternative to the Americas and What Does It Do?," *Americas Quarterly*, Spring 2011 <<http://www.americasquarterly.org/hirst/article>>.

leadership in promoting Cuba's hemispheric integration¹³⁶ was tangible very soon after he became president in January 2003. In May of that year, Brazil and Venezuela led the opposition at the Organization of American States (OAS) against a U.S.-backed statement condemning human rights violations in Cuba that was withdrawn having failed to garner enough support.¹³⁷ In December 2008, Lula organized a special Latin American summit that excluded the U.S. and Canada and pointedly included Raúl Castro. He visited Havana several times in 2008 and 2009, paving the way for a group of Latin American leaders to follow suit, and in a visit to Washington, encouraged President Obama to improve ties with Cuba.¹³⁸ The Mariel investment could well be designed to guarantee cash-strapped Cuba a steady source of income once the expanded Panama Canal opens for business. Given that Foro de Sao Paulo members are now heads of state in most Latin American countries, consonant with their 21st century socialism regional integration plan, the Mariel port would be designated favored transshipment hub and business would be steered there by executive action or influence—this would represent a bonanza for Cuba.

Part of Brazil's official script on the Mariel Port is that the U.S. embargo is about to end¹³⁹ and that Cuba is strategic for Brazilian companies because of

its geographic position.¹⁴⁰ In fact, a 2009 cable from the U.S. Embassy in Brasilia revealed how the Mariel project was aimed at challenging the U.S.'s sanctions policy towards Cuba.¹⁴¹ A source frequently cited by U.S. journalists who has links to Cuba¹⁴² explains that Brazil's involvement in the Mariel was "sending a message to Washington and the European Union and other emerging powers that it backs the transformations underway in Cuba."¹⁴³ Indeed, Cuba has mounted a strong and concerted anti-embargo campaign using the Mariel Port as an enticement for U.S. business interests and a tool of alleged political and geopolitical leverage.¹⁴⁴ At the port's inauguration, the first ship serviced at the port came from the U.S. with a shipment of frozen chicken, a highly publicized "coincidence."¹⁴⁵ (All exports of agricultural and medical products are allowed under the present sanctions' regime, on a cash basis only.) There are, however, no signs of the end of the U.S. embargo.

Opposition Members of Congress in Brazil have questioned the unprecedented support for Cuba during the Lula and Rousseff presidencies. The Social Democratic Party of Brazil noted that "resources go to the Castro dictatorship, "chavista" Venezuela, and other countries of similar ideological bent but are missing for structural projects in Brazil, especially for urban transport in our cities."¹⁴⁶ Brazilian prose-

136. The movement to normalize relations with Cuba has gradually gained strength, particularly with the founding of CELAC (Community of Latin American and Caribbean States) in 2011 and the gradual weakening of the OAS.

137. Pablo Bachelet, "Statement Condemning Cuba Fails at OAS," Washington, *Reuters*, May 19, 2003..

138. Erikson and Wander, "Cuba's Brave New World," op. cit.

139. The director general of APEX-Brazil declared: "The embargo is going to collapse under its own weight," he said. "Business will knock it down." (P. Grogg, op.cit.)

140. N. Acosta & M. Frank, op.cit.

141. "DOJ Investigation of Odebrecht Sought for Foreign Activities," Capitol Hill Cubans, 13 November 2013.

142. Arturo López-Levy, typically presented in the media as "analyst," and "political scientist," graduated from Cuba's top intelligence school but lives in the U.S. and is a Ph.D. candidate at the University of Denver in Colorado. He reportedly maintains links with officials from Cuba. (See "Dios Los Cría y el Castrismo Los Junta," September 17, 2014, <http://cubaaldescubierto.com>).

143. P. Grogg, op.cit.

144. Arturo López-Levy, cited in P. Grogg, op.cit.: "The strengthening of ties promises greater access to the Chinese and Russian markets, attraction of investment in areas of common interest like the pharmaceutical and energy industries, and cooperation for the modernization of strategic areas in defence, ports and telecommunications."

145. "Cargamento de pollos de EE.UU inaugura puerto de Mariel," martinoticias.com, 28 de enero de 2014; N. Acosta & M. Frank, op.cit.

146. Rolando Cartaya, "Critican a Dilma por dar a Cuba lo que quita a Brasil," www.martinoticias.com, 27 de enero de 2014. (The name of the party is Partido de la Social Democracia Brasileña, PSDB.)

cutors, federal police, and members of Congress who have attempted to clarify aspects of the Mariel port project with the Brazilian and Cuban governments, as well as with *Odebrecht*, have only faced a wall of secrecy.¹⁴⁷ Members of the opposition appealed to the Federal Supreme Court to overthrow the secrecy, and a ruling is pending.¹⁴⁸ The pending inquiries seek explanations for the increase of US\$92 million from the original loan agreement for the Mariel Port, the criteria used to select *Odebrecht* as builder, contract amendments, and design changes.¹⁴⁹ Allegations of corruption are also under investigation. High-ranking members of Congress claim the Cuba loans are politically-motivated "shady deals" granted to favor P.T. campaign contributors.¹⁵⁰ (Dilma Rousseff is running for reelection in October 2014.) Records obtained by the Brazilian Congress indicate that from 2009 to 2014, among the companies receiving loans with public money from BNDES to finance their exports to foreign governments and corporations, *Odebrecht* was at the top, having received US\$5 billion, 41% of the total; during that period it signed 35 contracts to finance its infrastructure projects with 32 governments, mostly politically-compat-

ible, including Angola, Argentina, Cuba, Ecuador, Venezuela, and the Dominican Republic.¹⁵¹ Brazil's Justice Department and Federal Police are also investigating the legality of loans for Brazilian exports including to Cuba and there are allegations of kick-backs and irregularities with an *Odebrecht* payment to an engineering company to inspect structures of the Mariel terminal.¹⁵²

IS AN UNUSUAL "MEDICAL COOPERATION" BEHIND THE LOAN REPAYMENTS?

Brazilian government officials insist that "Cuba strictly lives up to its financial commitments with Brazil."¹⁵³ That may be so if repayment was planned through the use of Cuban citizens as export raw material in what is arguably human trafficking. First, Cuba is generating estimated net annual revenues of US\$404 million from services of Cuban doctors deployed to Brazil. Second, Cuba is exporting to Brazil increasing amounts (US\$92 million in 2013)—mostly to state entities—of blood products and extracts of glands and organs, presumably obtaining revenues made available for debt servicing.¹⁵⁴

147. Eduardo Militão, "Odebrecht e Embraer concentram 81% do crédito do BNDES para o exterior," 16/07/2014 <<http://CongressoEmFoco.uol.com.br/>>

148. Senator Alvaro Dias (PSDB-PR) filed an injunction against President Dilma Rousseff and the current Minister of Development, Industry and Trade, Mauro Borges. (Eduardo Militão, "Procuradoria E Pf Investigam Empréstimo Brasileiro a Cuba," 27/06/2014, www.Congressoemfoco.Uol.Com.Br/)

149. Eduardo Militão, "Cuba Não Revela...", op.cit.

150. Ibid.

151. Eduardo Militão, "Odebrecht e Embraer concentram 81% do crédito do BNDES para o exterior," 16/07/2014 <<http://CongressoEmFoco.uol.com.br/>>

152. Eduardo Militão, "Cuba Não Revela...", op.cit.

153. P. Grogg, op.cit.

154. The Harmonized System commodity code 3001.02 for "glands and other organs" or "extracts of glands and other organs or their secretions" includes human cadavers, body parts, organs, musculoskeletal tissue, testicular and ovarian tissue, glands, stem cells, bone, cartilage, tendon, meniscus, skin, amniotic membrane, aortic and pulmonary valves, blood vessels, cord blood, gametes intended for transplants and for scientific, medical and educational purposes; pharmaceutical products, and therapeutic and cosmetic purposes, corneas, retinas, sclera, embryos, placenta, semen, bone marrow, hair, umbilical cord, cultured cells, and all "glands and other organs for organo-therapeutic uses, dried, whether or not powdered; extracts of glands or other organs or of their secretions for organo-therapeutic uses; heparin and its salts; bones, organs and other tissues of human or animal origin, prepared for therapeutic or prophylactic uses and research or medical studies; other human or animal substances prepared for therapeutic or prophylactic uses and research or medical studies, not elsewhere specified or included." ("Study of Possible Amendments to Heading 30.01 With Regard To Human Organs, Tissues, Etc. (Item Iii.A.12 On The Agenda)," Harmonized System Review Sub-Committee, World Customs Organization, 25th Session, Brussels, 29 January 2002.)

In August 2013 an agreement was announced for doctors employed by the Cuban government to provide health coverage for free in remote and underserved areas of the vast country as part of a Brazilian government program.¹⁵⁵ The Pan American Health Organization (PAHO)¹⁵⁶ serves as intermediary. Although PAHO's agreements with Cuba and Brazil are secret,¹⁵⁷ it has transpired, however, that Cuba's state-owned company *Comercializadora de Servicios Médicos Cubanos* obtains payment from Brazil through PAHO of 10,400 *reais* (US\$4,200) per doctor per month, then pays each doctor just 29.6% of this amount or US\$1,245.¹⁵⁸ Because Brazil also pays for airfare, moving, living, and other logistical expenses, as well as the commissions to PAHO, direct expenses incurred by Cuba associated with the program should be quite limited.¹⁵⁹

This arrangement benefits the Cuban regime, injected with very large sums of fresh money, and the P.T., with support and loyalty particularly of a large and traditionally disregarded electorate. This strategy was used in Venezuela in the early 2000s with the export

of thousands of Cuban health workers proving decisive in the early electoral success of Hugo Chávez that consolidated him in power and helped pave the path to radicalization.¹⁶⁰ In fact, Brazilian sociologist Silvio Grimaldo de Camargo claims the plan goes back years when the Foro de Sao Paulo prioritized the export of health workers to progressive governments supportive of the Foro. The P.T., Grimaldo details, deliberately weakened the public health system by claiming there were too many doctors and prohibiting new medical schools and the expansion of vacancies in existing courses, then cutting 5.4 billion *reais* in the Ministry of Health budget and reducing by 50% the salaries of physicians employed by the federal government, provoking a mass migration (48,000 workers) from the federal public health system. Meanwhile, the conditions had been put in place to allow doctors trained in Cuba to practice in Brazil.¹⁶¹

This brand of medical diplomacy is possible because Cuba is a totalitarian state that can secure and control a steady pool of temporary workers as “export-

155. “Una cubana huye del programa Más Médicos y acusa a La Habana de engañarla,” Brasília, *Diario de Cuba*, 5 de febrero de 2014.

156. PAHO is the Americas regional office of the World Health Organization (WHO); both are part of the UN system.

157. Andres Oppenheimer, “U.N. agency may sponsor ‘modern-day slavery,’” *The Miami Herald*, August 28, 2013.

158. Cuba keeps US\$2,955 per month, which multiplied by twelve months (\$35,460) and by 11,400 doctors yields US\$404,244,000 per year. Initially, the Cuban doctors were earning only US\$400 a month, 9.5% of what Brazil was paying for their service. An additional \$600 per month was accumulating in an account in Cuba that the doctor could receive only if she/he completed the 3-year mission successfully and returned to Cuba to claim it.

159. The Cuban doctors sign a three-year contract allowing them to obtain a license from Brazil's Ministry of Health for primary practice exclusively in the cities where they are assigned and under the supervision of monitors and PAHO “coordinators” that “control and spy” on them to prevent them escaping, becoming pregnant, or violating any other aspect of the regulations to which they are bound by the Cuban government (see Leonardo Coutinho, “Opas, que negocio e ese,” *Veja*, 20 de agosto de 2014).

160. After the initial goal was achieved, many of the newly built clinics were shut down and a good number of Cuban doctors moved to other countries. The author explains this in greater detail in Maria C. Werlau, “Cuba-Venezuela's Health Diplomacy: The Politics of Humanitarianism,” *Cuba in Transition—Volume 20* (Washington: Association for the Study of the Cuban Economy, 2010), www.asce-cuba.org.

161. Felipe Moura Brasil, Blog, <http://veja.abril.com.br/blog/felipe-moura-brasil/> “Escrava cubana que atuava no ‘Mais Médicos’.” *Conheça a verdadeira história do programa do Foro de São Paulo.* 24/09/2014.

Table 1. Brazilian Imports from Cuba (in US\$)

Customs Code	Description	2013		2012	
		\$ Value	%	\$ Value	%
	Total Goods Imports	96,619,009	100.00	95,662,079	100.00
30012090	Extracts of glands, other organs, etc., for therapeutic uses	88,407,655	91.50	69,760,669	72.92
30021039	Other blood fractions, modified immunological products (medicaments)	3,856,345	3.99	4,386,310	4.59
30021029	Other blood fractions, modified immunological products, excl. medicaments	965,411	1.00	—	—

Source: Ministerio do Desenvolvimento, Brazil. Translated from Portuguese.

able commodities;¹⁶² it violates a number of international agreements including the Trafficking in Persons Protocol,¹⁶³ the Palermo Protocols against human trafficking, the ILO's conventions on the Protection of Wages¹⁶⁴ and on Forced or Compulsory Labor,¹⁶⁵ and international standards on the prohibition of "servitude"¹⁶⁶ and bondage.¹⁶⁷

Regarding Cuban exports described as "health cooperation," Brazilian and Cuban officials have offered

vague descriptions such as "especially medicines,"¹⁶⁸ "products for laboratories, public health and veterinary products,"¹⁶⁹ or "manufactured pharmaceutical products."¹⁷⁰ Not surprisingly, these exports began after Lula da Silva signed the wide-ranging economic agreements with Cuba in late 2003 that jump-started the current alliance.

Table 1, based on statistics from Brazil's Ministry of Development (Ministerio do Desenvolvimento),

162. The state is the sole employer and the average salary of a doctor barely guarantees subsistence (US\$64 a month on average), health professionals are forbidden from leaving their country without government permission, issuing them proof of their medical studies and credentials is punishable by law, and when sent to serve abroad, they must leave their families in Cuba and their passports are typically retained. Most agree to serve abroad in order to protect their job and career, gather some savings from the local allowances, gain access to consumer goods to send home, and/or find a route to escape Cuba. In most of their overseas assignments, they must often work very long hours, are under constant surveillance, are subject to a long list of prohibitions, have political duties and must inform on co-workers. Often they are sent to far-flung and insecure areas to live in very poor conditions. If caught escaping, they are forced back to Cuba. Despite these controls, thousands have deserted worldwide even though their families are not allowed to join them for at least five years. Their compensation varies by country, but is a minuscule fraction of what Cuba derives from their work. See more in: Maria C. Werlau, "Cuba's Health-Care Diplomacy: The Business of Humanitarianism," *World Affairs Journal*, March-April 2013.

163. The *Trafficking in Persons Protocol* defines trafficking in persons as "the recruitment, transportation, transfer, harbouring or receipt of persons, by means of the threat or use of force or other forms of coercion, ...or the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person, for the purpose of exploitation." (Art. 3, subpara (a.)). "The consent of the victim to the intended exploitation is irrelevant once it is demonstrated that deception, coercion, force or other prohibited means have been used." (Art. 3 subpara.(b.)) Exploitation may take the form of labor trafficking. "Exploitation shall include, at a minimum, ...forced labour or services, slavery or practices similar to slavery, servitude..." (Art. 3 subpara (a.))

164. ILO Convention on the Protection of Wages of 1949 holds that: "Employers shall be prohibited from limiting in any manner the freedom of the worker to dispose of his wages." (Art.6) ... "Deductions from wages shall be permitted only under conditions and to the extent prescribed by national laws or regulations..." (Art.8).

165. ILO Convention No. 29 of 1930 defines forced labor as: "All work or service which is exacted from any person under the menace of any penalty and for which said person has not offered himself voluntarily."

166. Servitude is the status or condition of dependency of a person who is unlawfully compelled or coerced by another to render any service to the same person or to others and who has no reasonable alternative but to perform the service. (*Combating Trafficking in Persons: A Handbook for Parliamentarians*, United Nations, No. 16, 2009.)

167. Cuba alleges it can pay doctors minimal wages, make them work in conditions of hardship, and keep their families hostage because it trained them for "free." A person becomes a bonded laborer when their labor is demanded as a means of repayment for a loan. Debt bondage is a form of slavery. (See "Debt bondage in the world: an underestimated and forgotten scourge," <http://www.gaatw.org>.)

168. Fernando Ravensberg, "Brasil y Cuba multiplican sus relaciones económicas," *Havana Times*, 18 de septiembre de 2012.

169. Ibid.

170. The original Portuguese, literally refers to "fabricação de produtos farmacêuticos. The 104 page report on Cuba-Brazil trade has no other detail on the origin of Cuba's imports to Brazil, US\$58.6 million in for 2005–2010. See: *Cuba: Perfil e Oportunidades Comerciais 2011* by Apex Brasil (Agencia Brasileira de Promocao de Exportacoes e Investimentos), pp. 33 and 40.

Table 2. Cuban Exports of Human or Animal Blood Prepared for Therapeutic Uses: Total and to Brazil (in US\$)

	2002	2003	2004	2005	2006	2007
Total	37,349,003	32,386,632	23,020,478	30,650,512	38,643,533	31,368,893
Brazil	570,493	36,633	391,068	1,410,067	4,569,136	11,844,307
	2008	2009	2010	2011	2012	2013
Total	14,186,330	18,156,364	28,239,160	63,523,047	29,431,681	N/A
Brazil	2,742,662	9,634,130	9,634,130	16,897,709	4,437,025	4,821,756

Source: Observatory of Economic Complexity for 2000-2012; and Ministerio do Desenvolvimento, Industria e Comercio Exterior, Secretaria de Comercio Exterior, Brazil, for Brazilian imports for 2013.

shows the value of imports from Cuba for two customs categories, extracts of glands (3001) and blood fractions (3002) for 2012 and 2013. In August 2014, Brazil's Ministry of Health officially responded to a congressional inquiry of February 2014¹⁷¹ regarding imports under the code for blood products (3002), categorically stating: "This Ministry is not aware of any import or export of blood, blood components, or blood derived products between Brazil and Cuba..."¹⁷² However, Brazilian officials have told a journalist that these imports are insulin of animal origin.¹⁷³ This is very puzzling. Insulin not produced synthetically is usually produced from pigs, but is apparently rare and is not reported under a trade classification that would match. Furthermore, Cuba has never reported such production, and being in the order of many millions of dollars, it has significant impact for the size of the Cuban economy and is also remarkable given the extreme scarcity of animals in

Cuba. The most plausible explanation is that these exports consist of human blood,¹⁷⁴ a traded commodity consisting of human blood by-products for therapeutic purposes—plasma, blood components, and plasma-derived medicines (PDM) produced at Cuba's vast biotechnology complex that Cuban officials report as export products.¹⁷⁵ In fact, PAHO reports that 95% of all units of human blood Cuba collects is fractionated into components.¹⁷⁶

Brazil's blood purchases from Cuba (Table 2) picked up noticeably in 2005, growing quickly from \$391 thousand in 2004 to \$16.8 million in 2011,¹⁷⁷ then decreasing after 2012 as Brazil probably began its own production of PDMs with Cuba's help. In January 2003, Lula had signed an agreement for Cuba to license Brazil's Oswaldo Cruz Foundation to produce the drug Interferon Alpha 2B and in 2004, Cuba's Center for Genetic Engineering and Biotechnology, which produces interferon, entered into a

171. Câmara dos Deputados, Arolde de Oliveira, 26/02/2014, RIC 4.017/2014, Solicito informações ao Ministro da Saúde acerca da importação de sangue, componentes e hemoderivados de Cuba. (Translation from Portuguese.)

172. Letter with attachments from Arthur Chioro, Minister of Health, August 5, 2014, Brasília, Aviso 501/GM/MS.

173. Emails and telephone conversations of August-September 2014 with Brazilian journalist Leonardo Coutinho, from *Veja* magazine.

174. The code for blood products (3002) encompasses both human and animal blood regardless of which type is actually involved.

175. PDMs reportedly produced by Cuba are albumin (for intravenous infusion), interferon, intravenous immunoglobulin (intacglobin), intramuscular immunoglobulin, hyperimmune ANTI-D (Rho) immunoglobulin, hyperimmune tetanus immunoglobulin, hyperimmune rabies immunoglobulin, enriched immunoglobulin (IGEGAM), hepatitis-B immunoglobulin, citomegalovirus immunoglobulin, and coagulation factor VIII and IX. (Enrique Portuondo and Yolaynis Cárdenas, "Recibe Plasmas Planta de Hemoderivados," *cubano1erplano.com*, 10 de enero de 2011; "Posee Cuba una de las pocas plantas de hemoderivados del mundo," *Juventud Rebelde*, 15 de octubre de 2006.)

176. As reported by PAHO and WHO. See "Improving Blood Availability and Transfusion Safety in The Americas," 48th Directing Council 60th Session of The Regional Committee, Washington, D.C., 29 September-3 October 2008, PAHO & WHO, August 6, 2008.

177. The Observatory of Economic Complexity <atlas.media.mit.edu>; and Importacao brasileira Cuba principais produtos, Ministerio do Desenvolvimento, Secex (Secretaria de Comercio Exterior, Industria e Comercio Exterior <http://www.mdic.gov.br/>)

technology transfer agreement with Brazil.¹⁷⁸ (Cuba is one of very few countries in the world that produce interferon.¹⁷⁹) The largest importing entity in 2012 and 2013 was the Fundacao Oswaldo Cruz, linked to Brazil's Ministry of Health.¹⁸⁰ Net profits from these businesses are unknown, as they are solely owned by the Cuban state and financial statements are not available, but Cuban official media reported that Cuba's main facility producing blood by-products, *Empresa de Sueros y Hemoderivados*, had reported costs of 0.67 per peso in 2010,¹⁸¹ which would represent a return of 33%; extrapolating it to exports of US\$92 million would leave Cuba around US\$30 million a year in net revenues.

As with the export services of doctors, there are serious ethical concerns regarding these products. Selling the blood of voluntary, uncompensated donors is contrary to international standards including the Code of Ethics for Blood Donation and Transfusion adopted by WHO and the International Society of

Blood Transfusion.¹⁸² Cuba has for years reported a 100% rate of "voluntary altruistic donors,"¹⁸³ yet all citizens excepting the high-ranking *nomenklatura* are required to provide one blood donation before any surgical procedure, including abortions.¹⁸⁴ Voluntary blood donation has for decades been enthusiastically and systematically promoted countrywide¹⁸⁵ and is often a requirement at work centers and for young men serving the obligatory two-year military service.¹⁸⁶ Given the country's chronic food shortages, however, just the cheese sandwich and watered-down glass of juice given to donors is enough incentive for most, especially in prisons. Yet, some people are turned into "permanent donors" under the premise, with no apparent scientific basis, that they will develop polycythemia vera, an overproduction of red blood cells, unless they give blood regularly.¹⁸⁷ What's worse, in the 1960s the blood of political prisoners was massively drained on their way to their execution and the blood was reportedly sold to Vietnam.¹⁸⁸

178. "Posee Cuba una de las pocas plantas de hemoderivados del mundo," op.cit.; Fernando Ravsberg, "Brasil y Cuba multiplican sus relaciones económicas," *Havana Times*, 18 de septiembre de 2012.

179. Interferons are naturally occurring proteins with antiviral and immunoregulatory properties. In Cuba, the production of natural interferon from the leukocytes of blood donors was achieved in 1981 and led to the founding of Cuba's biotechnology industry and a leading profit-seeking export business. (See Dr.C. Julio César Hernández Perera, "Interferón «a la cubana»," *Juventud Rebelde*, 13 de octubre de 2012; Héctor Santana, Eduardo Martínez, Julio C Sánchez, et.al." Molecular Characterization of Recombinant Human Interferon Alpha-2b Produced in Cuba," *Biotecnología Aplicada* 1999, 16:154–159; www.cubabiotechnology.com.)

180. Empresas Importadoras por Faixa de Valor (Us\$)—Jan-Dez/2013 & Jan-Dez/2012, Ministério do Desenvolvimento, Indústria e Comércio Exterior, Secretaria de Comércio Exterior—SECEX.

181. "Mejora calidad en la industria de hemoderivados cubanos," *Opciones*, 10 de octubre de 2008. (Reported profits were US\$2.5 million in 2010.)

182. See Code of Ethics for Blood Donation and Transfusion of the International Society of Blood Transfusion <<http://www.isbtweb.org/about-isbt/code-of-ethics/>>

183. See Table 19.15—Donantes de sangre por provincias / Blood donors per province, Oficina Nacional de Estadísticas e Información, República de Cuba, www.one.cu. Cuba has an overall collection rate several times the average for the region. (Supply of Blood Transfusion in Latin America and the Caribbean Countries 2010 and 2011, PAHO <http://www.paho.org/hq/index.php?option=com_docman&task=doc_view&gid=22468&Itemid=>.)

184. Over a dozen individuals from Cuba were consulted. Also see Juan Juan Almeida, "La sangre de exportación," *martinoticias.com*, 7 de agosto de 2013. (J.J. Almeida was also interviewed by the author, in Miami, August 9, 2013.)

185. For a sample of vast official media coverage in Cuba, see: "Cederistas cubanos sobrecumplieron plan de donaciones de sangre," *Radio Rebelde*, 2013.08.30; Ramón Barreras Ferrán, "Donar sangre: el valor de la solidaridad," *Trabajadores.cu*, 16 de septiembre de 2011; Yailin Orta Rivera, "Donaciones de sangre en Cuba: la altura del humanismo," *Especial para la Mesa Redonda*, 13 de junio de 2013; "Cumplió Cuba con el programa anual de donaciones de sangre," *Radio Ciudad del Mar*, 31 de diciembre de 2013; "Cuba: Donaciones de sangre voluntarias, gesto de altruismo y solidaridad," 4 de octubre de 2013, <http://www.cubainformacion.tv>.

186. Testimony of a young man who served military service in the early 2000s and wishes to remain anonymous. (Interview, Miami, August 14, 2013.)

187. Several medical doctors and background medical literature were consulted, August-September 2014.

Table 3. Cuban Exports of Glands and Organs: Total and to Brazil (in US\$)

Year	Total Exports	Exports to Brazil	Brazil's share of total exports (%)
2013	N/A	88,407,655	N/A
2012	67,787,185	67,611,526	99.74
2011	56,831,612	56,799,614	99.94
2010	50,012,668	50,006,405	99.99
2009	35,187,555	35,132,666	99.84
2008	30,183,552	30,133,779	99.84
2007	49,857,213	49,839,853	99.97
2006	16,412,373	15,515,816	94.54
2005	4,955,427	4,546,858	91.76
2004	172,504	34,358	19.92
2003	499,805	25,804	5.16
2002	682,860	0	0.00
2001	682,860	0	0.00
2000	203,599	0	0.00

Source: Observatory of Economic Complexity for 2000-2012; Ministério do Desenvolvimento, Indústria e Comércio Exterior, Secretaria de Comércio Exterior, Brazil, for Brazilian imports for 2013.

“Extracts of glands and organs for therapeutic purposes” (code 3001) also figure prominently in Cuba-Brazil trade (Table 3). This Cuban export goes almost exclusively to Brazil and grew wildly from \$25,804 in 2003 to US\$88 million in 2013. Brazilian officials have said it consists of interferon,¹⁸⁹ but it is produced from the leukocytes of blood donors. Not reporting it under code 3002 would violate international customs’ practices based on the harmonized trade nomenclature and international convention, to which Cuba and Brazil are parties.¹⁹⁰

These Brazilian medical imports from Cuba also raise questions regarding their safety, as blood cannot be screened for all diseases and even the most advanced laboratories make mistakes. Because Cuba’s biotechnology industry is fully in the hands of a secretive

military regime, the regulator is one and the same as the producer/seller. Measures are, no doubt, in place to assure quality, but the fact is that many factors could impact the procurement, handling, screening, storing, and transporting of human biological material.

For example, theft and corruption are rampant in Cuba plus infrastructure is woefully lacking (electricity, water, garbage collection, etc.), all of which could affect even the prized scientific pole. Likewise, due to the nature of the system, testing and production involving human material is probably undertaken without consent of the donors, who also lack actual judicial guarantees. Cuba began research into the possible applications of stem cell therapy in 2003 and more than 5,000 patients have now had this regenerative treatment;¹⁹¹ there is no information on the ethics and procedures involved or if Cubans are the favored patients.

There are disconcerting reports from Cuba of alleged practices that are shocking. In April 2014, a common prisoner released on medical license claimed that chemical tests were being conducted on inmates and that two fellow prisoners had died, while he and three others had been near death.¹⁹² It has also been reported that in the 1990s, Cuba was developing experimental regenerative treatments that required transplanted neuronal tissue (“sustancia nigra”) to be removed from live embryos. The mothers, while consenting to an abortion, were not aware this would take place—in fact, some pregnancies were allegedly interrupted under false premises in order to harvest the embryo tissue.¹⁹³ More recently, several official claims of organ trafficking have been leveled against

188. See Maria C. Werlau, “Cuba’s Blood Exports: A Scandalous Business,” January 1, 2014, www.cubaarchive.org.

189. As related to the author by *Veja* journalist Leonardo Coutinho, August 2014.

190. The International Convention on The Harmonized Commodity Description and Coding System, Brussels, 14 June 1983, as amended 24 June 1986.

191. “Cuba has used stem cells to treat over 5,000 patients,” EFE, February 16, 2014.

192. Although warned not to talk, he told his story to an independent journalist in Cuba and showed his wound from a surgery and a drainage bag. The story was published with his photograph. (Calixto R. Martínez Arias, “Denuncian experimentos químicos con presos: Dos reos muertos y cuatro graves,” *La Habana*, 27 de marzo de 2014.)

193. Víctor Llano, “Sustancia nigra fetal,” www.libertaddigital.com, 28 de marzo, 2005; Dr. Hilda Molina, “Cuban Medicine Today,” http://www.futurodecuba.org/ARticle%20by%20Dra_%20Molina.htm.

the head of the autopsy department of a large Havana hospital, which, as all medical facilities in Cuba, is in state hands.¹⁹⁴ The think tank *Cuba Archive* recently detailed reported cases of disappearing newborns and of mutilated or missing remains, posing the question whether organs and body parts are being harvested in Cuba.¹⁹⁵

Several international media reports point to political considerations behind the purchase of some of Cuba's biopharmaceutical exports of questionable quality and effectiveness to countries in Africa and Latin America, Vietnam and China. Among the cited products are Vidatox, produced from blue scorpion poison and sold as a cancer cure for US\$205 per 30ml vial, bacterial larvicides for malaria, and rat poison.¹⁹⁶ In Venezuela, the Comptroller has report-

ed many "irregularities" in imports of medicines and medical products from Cuba.¹⁹⁷

Finally, Cuba's secretive regime has alliances or collaborations in the biopharmaceutical field with rogue states such as Iran and Syria and the former regimes of Libya and Iraq. U.S. government officials have said Cuba exports dual-use biological weapons technology to these terrorist states, which leads to concerns of cooperation in the development of biological and chemical weapons.¹⁹⁸

Regardless of all of the above, Brazilian authorities are intent on continuing the "health cooperation" with Cuba and moving forward with plans to integrate the two countries' biopharmaceutical production. To date, the latter has raised almost no media coverage or public debate in Brazil.

194. Authorities have allegedly investigated and found no proof. (See Vladimir Turró Paez, "Médico es investigado por Tráfico de Órganos Humanos," *Misceláneas de Cuba*, 12 de febrero de 2014.)

195. "Mutilated or missing remains and disappearing newborns: Are organs and body parts being harvested in Cuba?," Report of October 1, 2014, www.CubaArchive.org. The author is Executive Director of this organization.

196. Adriel Reyes, "Científicos cubanos cuestionan efectividad del Vidatox en la cura del cáncer," *martinoticias.com*, 18 de julio de 2014; Andrew Jack, "Cubans court controversy in malaria battle," *The Financial Times*, April 29, 2012; David Sosa, "Producto de Labiofam se distribuye en Ecuador pese a polémica," *martinoticias.com*, 6 de febrero de 2013; Juan O. Tamayo, "Critican venta de larvicidas cubanos para combatir la malaria en África," *El Nuevo Herald*, 1 de julio de 2012.

197. "La Contraloría General halla irregularidades en la compra de medicamentos a La Habana," Caracas, *Diario de Cuba*, 19 de abril de 2014. (The Comptroller's 2013 Report, based on an analysis of nine import contracts in 2012 and 2013 from Cuba worth 2.8 billion bolivars, details how purchases were made without any needs-based planning and, in some cases, were not even needed; some were greatly overpriced; others could not be found at all; some were not distributed in a timely manner, their shelf life shortened due to inadequate storage and, in one case, a lot was contaminated with insects. A 2010 report also detailed irregularities.)

198. "Teherán y La Habana dan pasos 'agigantados' para un convenio farmacéutico, dice el embajador iraní," La Habana, *Diario de Cuba*, 6 de octubre de 2014. "Cuba and Syria Consider Medical and Pharmaceutical Collaboration," Cuban News Agency, July 3, 2014; "Cuba y Siria suscriben acuerdos para colaborar en biotecnología," La Habana, EFE, 16 de septiembre de 2010; "Cuba trading bio-chem tech with Iran, Iraq, Syria," *WorldTribune.com*, June 11, 2002; Jim Burns, "Cuba Developing Bio-Weapons, US Official Says," *CNSNews.com*, July 7, 2008.