EMPIRICAL STUDY

IN THE CLUB: A STUDY OF THE CORRELATION BETWEEN WORLD TRADE ORGANIZATION MEMBERSHIP AND NATIONAL WEALTH

I. INTRODUCTION

For almost sixty years, many of the trading nations of the world have come together through the World Trade Organization ("WTO") or its less institutional predecessor, the General Agreement on Tariffs and Trade ("GATT").[1] Through these structures, the ground rules for international trade have been laid and enforced.[2] The desire to have a seat in the WTO is more than natural for any country which hopes to grow wealth through commerce. Entrance into this club is sometimes viewed as such a prize by those on the outside that substantial concessions can be squeezed out of applicants as the price of admission.[3]

Among other benefits, the WTO holds out a promise of wealth.[4] Membership is supposed to mean a country will be better off than it would be without it. This begs the question of whether that promise is being kept.

This Study first looked at a WTO member country's Gross Domestic Product ("GDP")[5] for one, five, and ten years before that

1. THE WTO AS AN INTERNATIONAL ORGANIZATION 1 (Anne O. Krueger ed., 1998).

2. *Id.*

3. *See, e.g.*, Jeffrey D. Sachs & Wing Thye Woo, *China's Economic Growth After WTO Membership*, 1 J. CHINESE ECON. & BUS. STUD. 1, 4–5 (2003) (describing the costs of entrance into the WTO on China's economy). The WTO is unique in the extent of the contractual obligations it places on member states and in the enforcement mechanisms built into its dispute resolution system, which include multilaterally approved trade sanctions. Richard Blackhurst, *The Capacity of the WTO to Fulfill Its Mandate*, *in* THE WTO AS AN INTERNATIONAL ORGANIZATION 31, 32 (Anne O. Krueger ed., 1998).

4. *See* WORLD TRADE ORG., 10 BENEFITS OF THE WTO TRADING SYSTEM 8 (2007), http://www.wto.org/english/thewto_e/whatis_e/10ben_e/10b00_e.htm [hereinafter 10 BENEFITS OF THE WTO].

5. GDP was used whenever possible. However, concepts of national wealth vary over time and from country to country. For some countries, other measures such as Gross National Product ("GNP") or Net National Product

country joined either the WTO or GATT, and then at figures for the same time periods afterward. Growth rates over these periods were then compared to each other to determine if WTO membership corresponded with a faster rate of development within the first decade of membership.

This Study demonstrates that there is a general correlation between WTO membership and faster rates of growth. This is true for countries that are members of the Organisation for Economic Co-operation and Development ("OECD") and non-OECD members. However, this correlation is not universal. The data was further broken down by geographic region and date of membership. In North America, the data showed that, on average, there was actually a faster rate of growth *before* WTO membership than after. Asian countries made only slight relative advances in growth rates over the decade before membership. The negative correlation also was present for countries which joined in the 1940s and 1980s. The 1970s showed only a slight positive correlation.

It is beyond the scope of this Study to look into the particular requirements each country faced in order to join the WTO or GATT. Further, whether any particular country successfully implemented those requirements was not considered. In addition, the background performance of the overall global economy is referenced only to give context to the data collected in this Study. Finally, and perhaps most importantly, each country's story of development is unique and depends on a variety of disparate factors.

Still, with almost 130 of the WTO's 151 members considered here,[6] two conclusions may be reached despite the preceding caveats.

("NNP") were used. So as not to compare apples with oranges, the numbers for each country are consistent in GDP, NNP, or whatever measure was used. As GDP is the measure used most often, the development data used in this Study will be referred to as such. For the GDP and other development data utilized in this Study, see INTERNATIONAL HISTORICAL STATISTICS: AFRICA, ASIA AND OCEANIA 1750–1993 (B.R. Mitchell ed., 3rd ed. 1999); INTERNATIONAL HISTORICAL STATISTICS: EUROPE 1750–1993 (B.R. Mitchell ed., 4th ed. 1992) [hereinafter EUROPE HISTORICAL STATISTICS]; INTERNATIONAL HISTORICAL STATISTICS: THE AMERICAS 1750–1993 (B.R. Mitchell ed., 4th ed. 1998); INTERNATIONAL HISTORICAL STATISTICS: THE AMERICAS AND AUSTRALASIA (B.R. Mitchell ed., 1983); The Worldbank Group: Data Query Systems, http://genderstats.worldbank.org/genderstats/query/default.htm (last visited Nov. 16, 2007). The International Historical Statistics series is a gathering of the main statistical series for all the countries in the world, grouped by region. The compilations rely, for the most part, on official national and international abstracts of statistics.

6. For a list of the WTO member countries, see World Trade Org., Understanding the WTO: Members, http://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm (last visited Oct. 16, 2007) [hereinafter World Trade

First, there is a correlation between WTO membership and faster economic growth. Second, whatever causal connection might exist between these two events can be overwhelmed by other factors. Possibilities of what those factors may be are suggested where appropriate.

II. BACKGROUND INFORMATION

A. History

Until the end of 1994, no international organization dealt with trade issues between countries.[7] That is not to say that such matters were left unattended. For almost fifty years, the international trading system had functioned under the aegis of the GATT.[8] Where the GATT was a system of treaties, the WTO is a full international institution.[9] WTO members, with very limited exceptions for the least developed countries, must accept in its entirety a common set of rules and disciplines covering goods, services, and intellectual property.[10] This is the so-called "single undertaking."[11]

B. Mandate

The functions of the WTO are to administer WTO agreements, serve as a forum for trade negotiations, handle trade disputes, monitor national trade policies, offer technical assistance and training to developing countries, and cooperate with other international organizations.[12] The organization is located in Geneva, Switzerland.[13]

These mandates purportedly deliver a range of benefits to WTO members, including good government, the promotion of peace, and economic development.[14] It is the last that is of concern here.

Org., Members]; *see also* World Trade Org., GATT Members, http://www.wto.org/english/thewto_e/gattmem_e.htm (last visited Oct. 16, 2007).

7. THE WTO AS AN INTERNATIONAL ORGANIZATION, *supra* note 1, at 1.
8. *Id.*
9. *Id.*
10. Blackhurst, *supra* note 3, at 33.
11. *Id.*
12. *Id.* at 46; WORLD TRADE ORG., THE WORLD TRADE ORGANIZATION… 8 (2007), http://www.wto.org/english/res_e/doload_e/inbr_e.pdf.
13. Blackhurst, *supra* note 3, at 36.
14. 10 BENEFITS OF THE WTO, *supra* note 4, at 1.

III. METHODOLOGY[15]

For each WTO member, its date of signature or accession to either the WTO or GATT was used as year zero. From there, overall national GDP was taken one, five, and ten years before membership in order to determine the rates of growth for the five and ten year periods preceding accession. The same was done for the decade following the accession date. As a final benchmark of comparison, the rate of growth from ten to five years before accession, and from five to ten years after, was also determined.

GDP was used whenever possible. "GDP measures the final purchases by households, business, and government by summing consumption, investment, government spending, and net exports."[16] It offers an overall picture of the state of a country's economy.[17] While GDP is the preferred measure used today,[18] the concept of how to measure national wealth has changed over time[19] and remains different from country to country.[20]

The goal of this Study is not, however, to compare countries with each other as such. Instead, the comparison is between countries' rates of growth during different time periods averaged together. Specifically, we compare the rate of growth in five and ten year intervals for the decade before and after a country joined either the WTO or GATT.

Therefore, it was not essential that the measure of wealth be the same for all countries, only that it is consistent within each country. Similarly, historical GDP data in constant year 2000 U.S. Dollars was available for many countries.[21] Whenever possible, these figures were used.

Unfortunately, despite good historical GDP figures available online and in print,[22] it was not practical to convert all figures to a

15. For an appendix to this Article containing each country's individualized data, see Wake Forest Center for Student Empirical Studies, http://law.wfu.edu/x6116.xml.

16. J. Steven Landefeld, *GDP: One of the Great Inventions of the 20th Century*, SURV. CURRENT BUS., Jan. 2000, at 6, 6, *available at* http://www.bea.gov/scb/pdf/beawide/2000/0100od.pdf.

17. *Id.* at 7.

18. *See, e.g.*, EUROPE HISTORICAL STATISTICS, *supra* note 5, at 918.

19. *See* Landefeld, *supra* note 15, at 6–7.

20. *See* EUROPE HISTORICAL STATISTICS, *supra* note 5, at 918 (showing that Netherlands, Norway, and Poland use three different forms of economic measurement: NNP, GDP, and NMP).

21. The Worldbank Group, World Development Indicators Online Database, http://devdata.worldbank.org/dataonline/ (last visited Oct. 29, 2007).

22. *Id.*; *see, e.g.*, EUROPE HISTORICAL STATISTICS, *supra* note 5, at 918 (showing that GDP numbers for Norway were available from 1945–1979).

uniform currency. As noted before, this does not affect this Study because we need only compare consistent figures for each individual country. It is only necessary that each country have its GDP listed in a consistent currency over the period of study.

In addition, currencies not already available as uniform year 2000 U.S. Dollars were often pegged to varying years of local currencies. Historical Consumer Price Index ("CPI") data was used to adjust for inflation within a given country's data over the years by converting all of that country's GDP figures into a single year's local currency.[23]

Finally, for some countries it was simply impossible to get enough usable data for the purposes of this Study. The reasons for this vary from country to country, including recent independence, World War II[24] or other conflict, or simply inadequate collection of statistics by the governments during the period considered. They were thus excluded from consideration by simple necessity.[25] Moreover, where a country's consideration in a particular pool of data seemed to have an unduly distorting effect on the overall results, that country was excluded in order to give a more accurate depiction of the general trend. Such exclusions are noted below in the footnotes for each relevant section.

23. Special thanks to Bob Herbert in the WFU Worrell Professional Center Library for teaching me this process.

24. GATT was originally signed in 1948, and thus data as far back as 1938 was necessary.

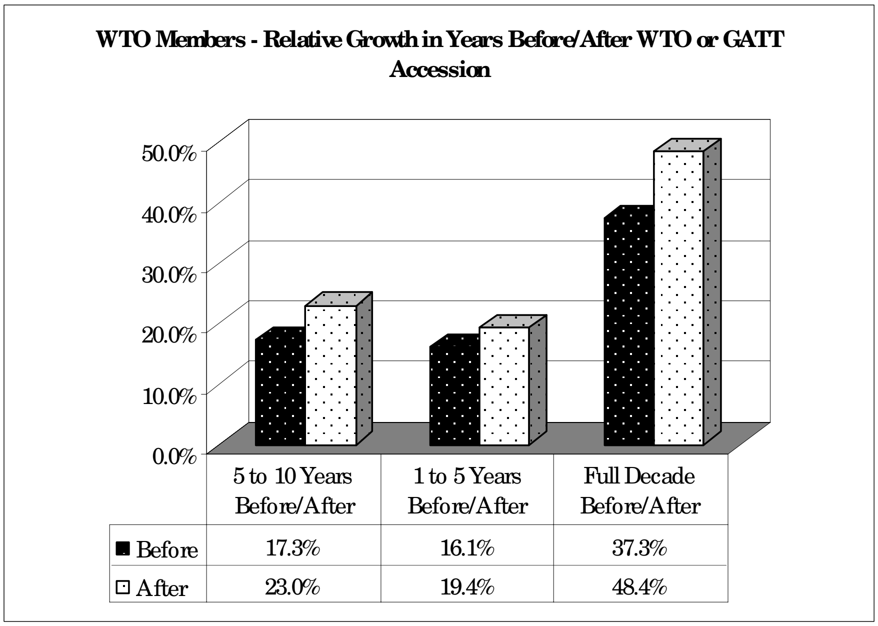
25. A list of WTO member countries that were not included in the Study due to a lack of usable data follows: Australia, Barbados, Belgium, Brunei Darussalam, Cuba, Cyprus, Ghana, India, Indonesia, Japan, Liechtenstein, Luxembourg, Maldives, Netherlands, New Zealand, Sweden, and Zimbabwe.

IV. RESULTS AND ANALYSIS

A. *General Trends*

i. *All Countries*

FIGURE 1



First, considering the WTO membership as a whole, there is a clear correlation between membership and accelerated growth rates.[26] On average, across all time periods and geographic regions, growth was 11.1% faster in the decade following accession than in the same time period preceding it.[27] Moreover, growth accelerated throughout the postaccession period. In the first five years, new members saw an average gain of 19.4%. Over the following five years, gain increased to 23%.[28]

These figures are also most likely to indicate a true link between WTO accession and increased rates of economic growth. As the largest pool of data available, the individual policies, histories, and economic conditions of any individual member countries will have a relatively smaller distorting effect on the final figures.[29]

26. *See supra* fig.1.
27. *Id.*
28. *Id.*
29. As discussed in the Asia section, *infra* Part IV.B.vii, incomplete data

B. Rich and Poor Countries

i. OECD Compared with Non-OECD

In this Study, the point of comparison is based on membership in the OECD. The OECD is composed of thirty member countries,[30] each of which is "committed to democracy and the market economy."[31] While not exclusively made up of rich countries,[32] it is still principally a club of wealthy nations.[33] Thus, its membership roster serves as a good reference point for affluent states when trying to determine if existing national wealth affects the general correlation between becoming a party to WTO/GATT and the boost in growth rates.

from some countries and unusually high or low rates of growth may affect the final numbers. Where possible, efforts have been made to minimize this problem to give a truer picture of general trends.

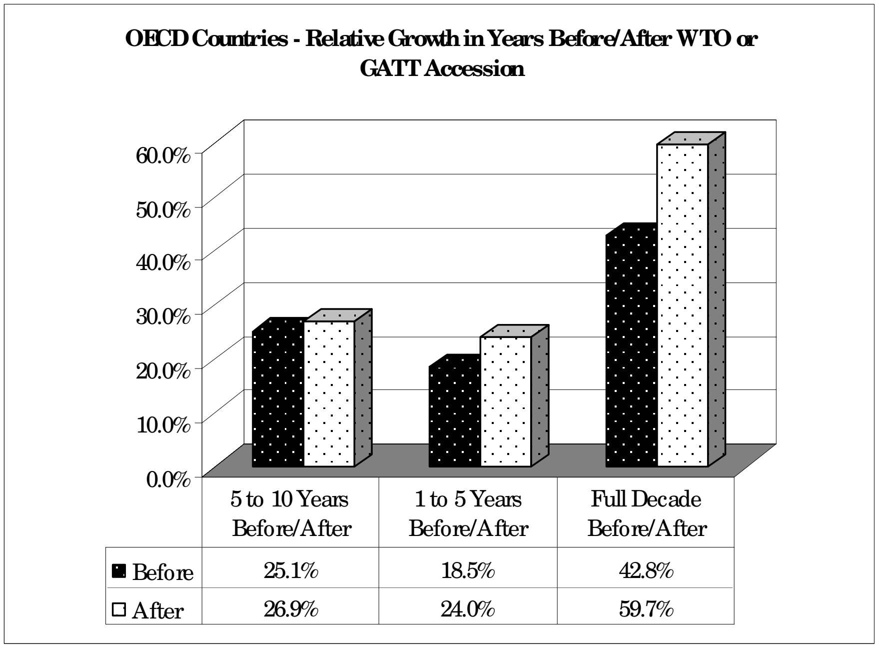
30. The thirty member countries are Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Portugal, Poland, Slovak Republic, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States of America. Organisation for Economic Co-Operation & Development, Ratification of the Convention on the OECD, http://www.oecd.org/document/58/0,2340,en_2649_201185_1889402_1_1_1_1,00.html (last visited Oct. 16, 2007).

31. Organisation for Economic Co-Operation & Development, About the OECD, http://www.oecd.org/pages/0,3417,en_36734052_36734103_1_1_1_1_1,00.html (last visited Oct. 16, 2007).

32. For instance, the Czech and Slovak Republics are member countries.

33. *See* Reuven S. Avi-Yonah, *Bridging the North/South Divide: International Redistribution and Tax Competition*, 26 MICH. J. INT'L L. 371, 384–85 (2004) (noting that the OECD "is still identified as the rich countries' club").

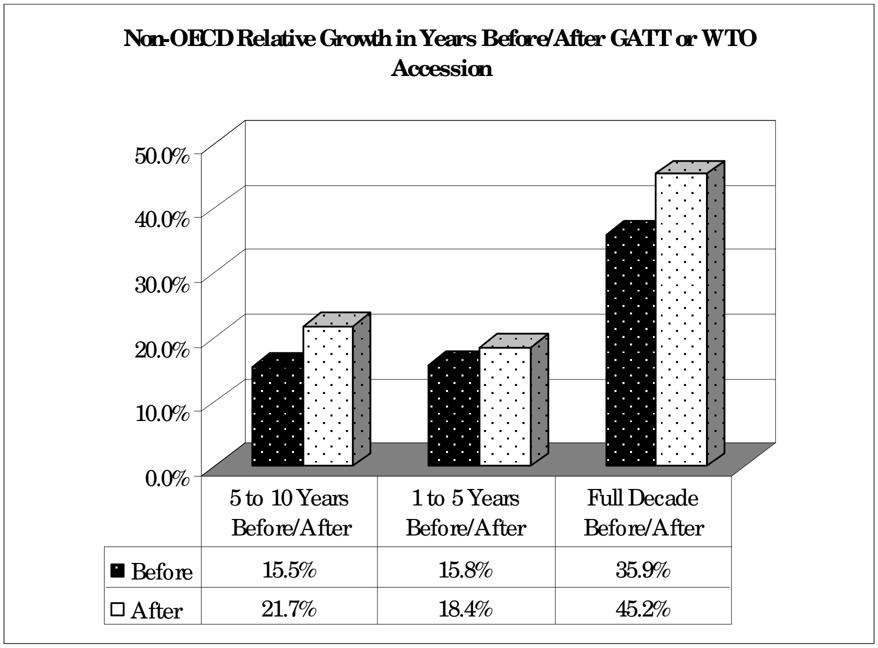
FIGURE 2[34]



As shown in Figure 2, *supra*, OECD countries saw strong gains of 24% in the five years immediately following their signing or acceding to the WTO or GATT.[35] This trend continued to the end of the decade, with 16.9% greater growth for the decade following membership over the one preceding it.[36] This is an even greater rate of growth than was seen by all WTO member countries.[37] By logical extension, this finding should be balanced by relatively slower growth in non-OECD countries. This, in fact, is the case.[38]

34. These OECD member countries were not considered because of a lack of usable data: Australia, Belgium, Ireland, Japan, Luxembourg, Netherlands, New Zealand, South Korea, and Sweden.
35. *See supra* fig.2.
36. *Id.*
37. *Compare supra* fig.1, *with supra* fig.2.
38. *See infra* fig.3.

FIGURE 3



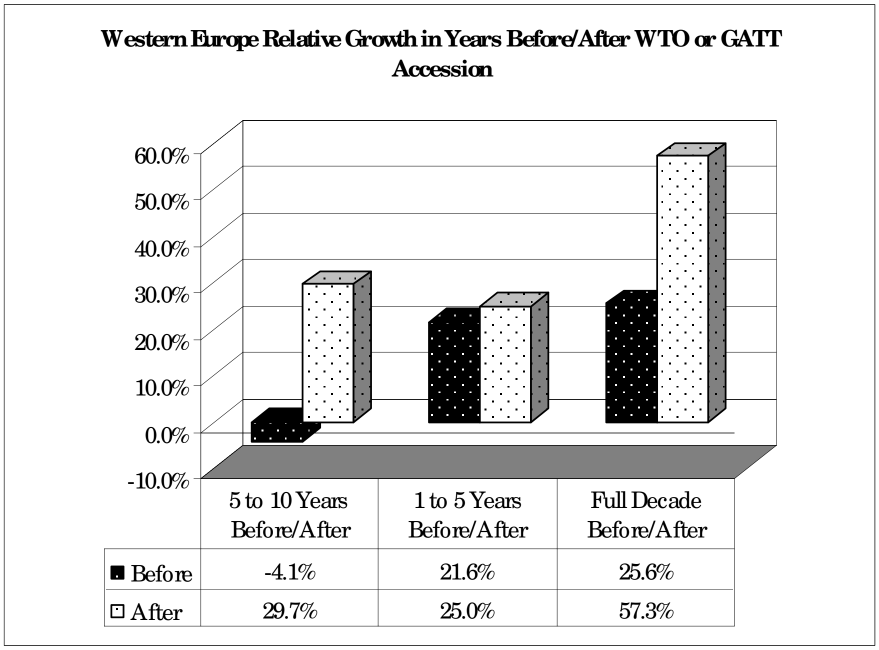
While the correlation between WTO or GATT accession and increased growth remains strong for non-OECD states, these countries received somewhat less significant gains than their more affluent counterparts. Non-OECD countries grew at 45.2% in the decade following accession,[39] whereas OECD members grew by 59.7%.[40] The OECD members not only got off to a faster start, but they saw greater sustained gains throughout the decade following their accession to the GATT. Wealth increased by 24% in the first five years and nearly 60% by the end of the decade.[41] Non-OECD countries grew by 18.4% in the first five years and only 45.2% by the end of the decade.[42]

39. *See supra* fig.3.
40. *See supra* fig.2.
41. *Id.*
42. *See supra* fig.3.

C. Geographic Region

i. Western Europe

FIGURE 4[43]

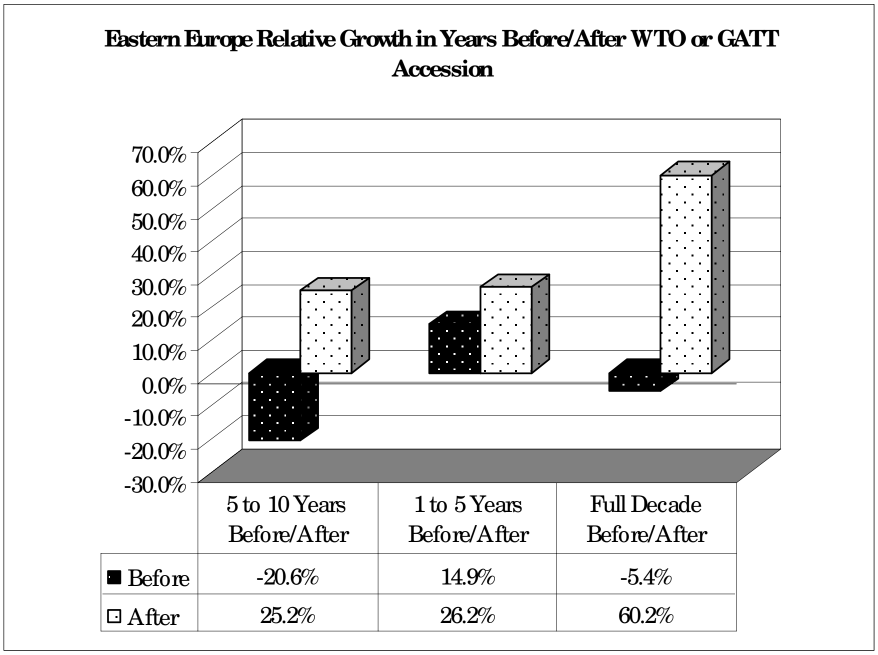


Looking now to Western Europe, it must be remembered that most of the countries considered here were early or original signatories to the GATT. Thus, for many Western European countries the pre-GATT period is heavily influenced by World War II. This explains why Western European GDP actually shrank during the first half of the decade before accession or signing.[44] The devastation from which Europe was recovering during the postsignatory decade also lends a likely explanation for why growth was so strong, coming in at 57.3%.[45] Notice that in the first decade after accession, countries that joined in the 1950s grew at an average of 60.5%.[46] Countries that joined in the 1940s also showed strong growth during the first ten years as GATT signatories, growing at 45.4%.[47]

43. Austria was the only Western European country excluded as an outlier.
44. *Supra* fig.4.
45. *Id.*
46. *Infra* app. A.
47. *Id.*

ii. Eastern Europe

FIGURE 5



Eastern Europe was another group of countries whose pre- and post-accession figures overlap with a sea change in the global political and economic situation resulting from the end of a war. This time it was not a recovery from the bomb damage of World War II, but a shift away from a state-run economy to a market economy that helped drive results.

Eastern European economies were, on average, shrinking during the first half of the decade before WTO accession, falling 20.6% during those five years and by 5.4% for the decade as a whole.[48] Yet, for the full decade following accession, these same economies grew by 60.2%.[49] That these countries so far exceeded the average gains of most WTO members during the same period is likely due in part to the economic disarray immediately following the end of the Cold War.[50] This presented a low starting point for comparison.

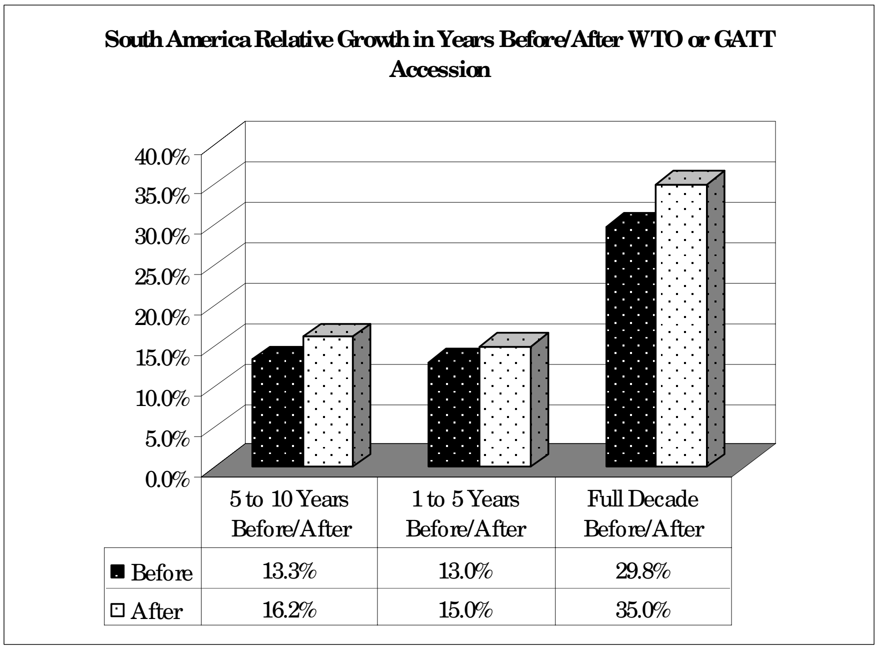
Thus, the formerly communist countries of Eastern Europe offer

48. *Supra* fig.5.
49. *Id.*
50. *See, e.g.*, PREM SHANKAR JHA, THE PERILOUS ROAD TO THE MARKET: THE POLITICAL ECONOMY OF REFORM IN RUSSIA, INDIA AND CHINA 22–68 (2002) (discussing the collapse of the Soviet Union and the resulting economic crisis in Russia and the other former Soviet states).

the most visible transition from a pre-WTO or GATT economy to a postaccession one. It must be remembered, however, that this accession took part in a larger context of developing market economies where none existed before.

iii. South America

FIGURE 6

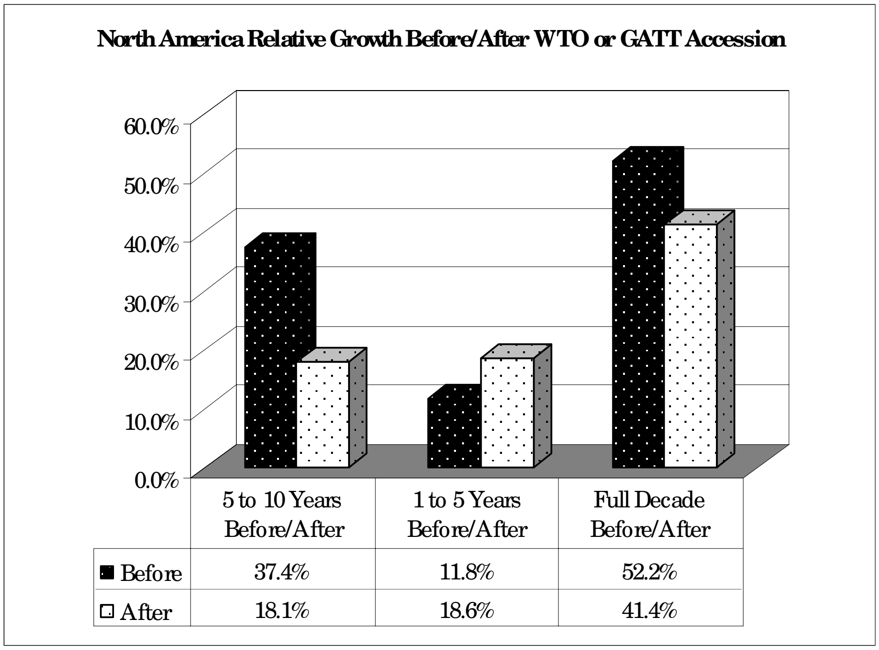


While the correlation between economic growth and WTO or GATT membership was present in South America, this was the slowest growing region during the decade after accession.[51] South American countries, on average, increased their GDP by only 35% during those ten years.[52] This is considerably less than overall average GDP increase of 48.4%.[53] While growth rates consistently exceeded those of the decade prior to accession, the rates of change showed much less of a correlation between WTO or GATT membership and an increased rate of development.

51. *Compare supra* fig.6, *with supra* figs.4–5, *and infra* figs.7–10.
52. *Supra* fig.6.
53. *Supra* fig.1.

vi. North America

FIGURE 7



North America is the only geographic region considered in which the correlation between WTO or GATT accession and increased economic development did not hold up.[54] Countries in this region grew their GDP by 52.2% in the decade before accession, yet only by 41.1% after.[55] The strongest growth was seen in the first half of the decade before accession. During those five years, North American economies grew by 37.4%.[56] The only period during which the general correlation held up was in the five years before and after accession.[57] Unlike the results in Eastern or Western Europe, there is no readily apparent historical explanation for why this might be the case.

At first glance, it appears that the broad range of North American economies may skew the data. North American WTO members range from tiny Caribbean islands[58] to the United States and Canada. One might think that the presence of those last two

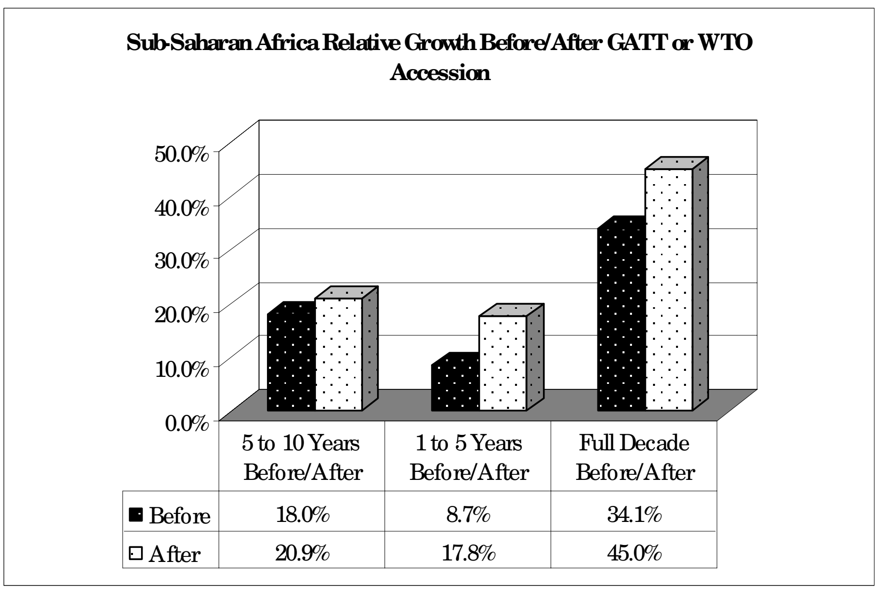
54. *Compare supra* fig.7, *with supra* fig.4–6, *and infra* fig.8–10.
55. *Supra* fig.7.
56. *Id.*
57. *Id.*
58. For example, St. Kitts and Nevis are tiny Caribbean islands that are member countries. *See* World Trade Org., Members, *supra* note 6.

economic behemoths would skew the data, yet their removal from the set did not produce appreciably different results.

The time period when North American countries joined does not affect the trend either. While the correlation was present in every other region, there were two time periods during which countries that joined the WTO or GATT did not see a corresponding increase in the rate of economic growth: the 1940s[59] and the 1980s.[60] For countries that joined in the 1970s, there was only a minor increase in the rate of growth in the decade following accession compared to the decade preceding it.[61] If the majority of North American countries joined during these periods, it would be apparent that factors specific to those decades were driving the discrepancy. However, only a handful of North American countries acceded to the GATT during those decades. Thus, while there may be some explanation for why North American countries, on average, do not seem to benefit from WTO accession, such research is beyond the scope of this Study.

v. Sub-Saharan Africa

FIGURE 8



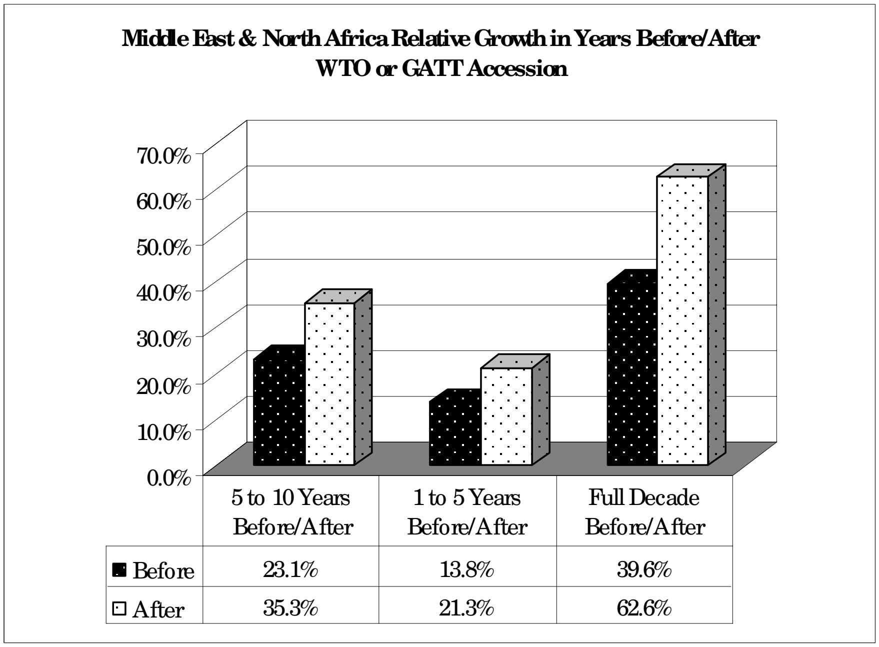
There is a correlation between WTO/GATT accession and increased rates of growth in Sub-Saharan Africa.[62] African countries

59. *Infra* app. A.
60. *Id.*
61. *Id.*
62. *See supra* fig.8.

grew their GDP by 45% in the ten years after joining the WTO/GATT, compared to 34% in the decade before.[63] The gains made by Sub-Saharan African states are roughly equivalent to those made, on average, by WTO members taken as a whole.[64]

vi. Middle East and North Africa

FIGURE 9



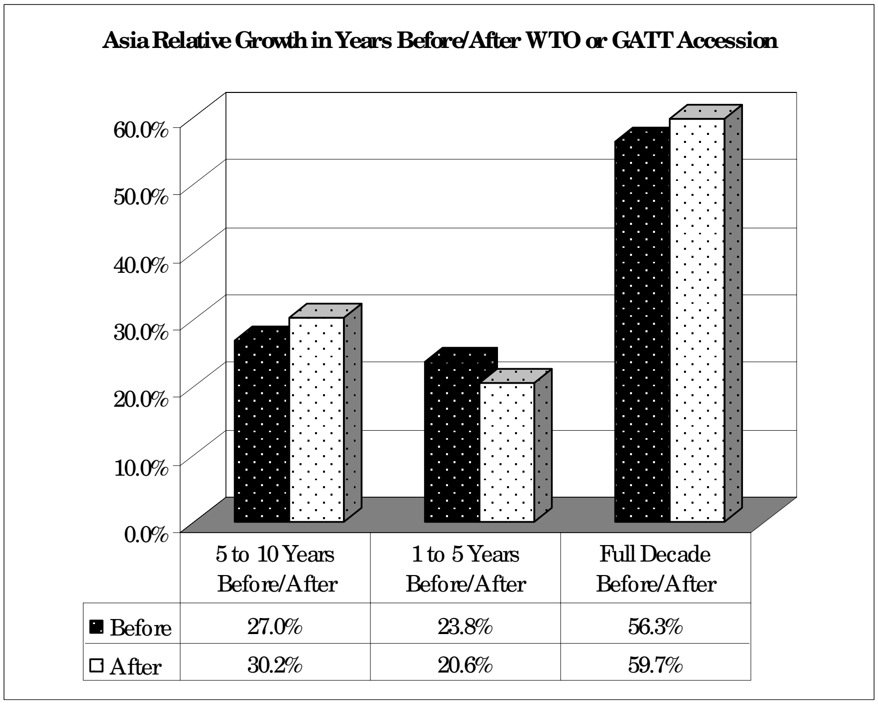
The correlation between increased rates of GDP growth and WTO/GATT accession is strong in the Middle East.[65] This region showed the strongest overall growth following accession, increasing its GDP by 62.6% in the first ten years of membership.[66] Growth accelerated in the decade following membership, rising from 21.3% in the first five years to 35.3% in the second.[67] By way of comparison, growth seemed to decelerate over the ten years approaching signing, falling from 23.1% in the first half of the decade to just 13.8% in the second.[68] This suggests that Middle Eastern countries are more likely to join WTO/GATT during periods

63. *Id.*
64. *Compare supra* fig.1, *with supra* fig.8.
65. *See supra* fig.9.
66. *Id.* Note, however, that Eastern Europe saw the biggest *increase* in growth in the ten years after joining. *Cf. supra* fig.5.
67. *Supra* fig.9.
68. *Id.*

of slow economic growth.

vii. Asia

FIGURE 10[69]



While the correlation between accelerated GDP growth and WTO or GATT accession remains present, it is less pronounced in Asia than in any region except North America.[70] While growth in the first decade following membership was a robust 59.7%, this represents a much smaller leap over the decade before accession—just 3.4%—than seen in most other regions.[71] Moreover, growth during the first five years of membership was actually surpassed by growth during the five years preceding membership.[72] While some

69. The growth numbers for China and Cambodia were not factored into the data in fig.10, *supra*. These two countries are recent WTO members with very strong economic growth in the period before membership and little or no data for the period after. Thus, their inclusion biased the results too heavily towards the pre-WTO period, obscuring the overall regional trend, which did show a slight correlation between WTO or GATT accession and increased growth rates.

70. *Compare supra* fig.10, *with supra* figs.4–9. *See also supra* note 54 and accompanying text.

71. *See supra* fig.10.

72. *Id.*

Asian countries did join during the 1970s and 1980s, when the correlation appears to be weakest, there is actually a wide distribution of signing dates. There is no answer readily apparent from the data in this Study as to why the general correlation did not hold up in Asia.

D. Decade of Accession

This section breaks down the WTO member list by the decade in which they joined either the WTO or GATT.[73] While it is beyond the scope of this Study to delve deeply into the ties between the economic development of any country and the overall world economy, a brief overview of the world economy since World War II is necessary to provide enough context to help understand the patterns produced by the data in this Study.

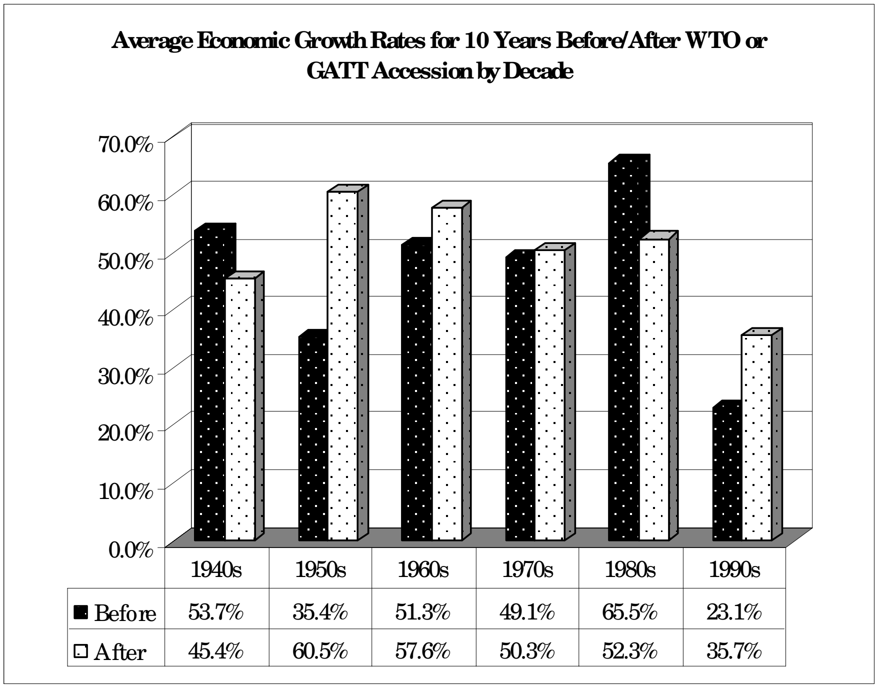
The performance of the global economy from 1950 to 1973 is sometimes called the "Golden Age" of global capitalism.[74] Following that phenomenal rise was, however, a "Long Downturn" which extended until the end of the Twentieth Century.[75]

73. The overall trend is depicted in Figure 11, *infra*.

74. *See* Richard Walker, *The Global Agitator or Capitalism's Recurrent Self-Criticism* (Nov. 21, 1998) (unpublished manuscript, online at http://geography.berkeley.edu/ProjectsResources/Publications/Global_Economic_Crisis.html).

75. *Id.* *See generally* ROBERT BRENNER, THE ECONOMICS OF GLOBAL TURBULENCE (2005).

FIGURE 11[76]



	1940s	1950s	1960s	1970s	1980s	1990s
Before	53.7%	35.4%	51.3%	49.1%	65.5%	23.1%
After	45.4%	60.5%	57.6%	50.3%	52.3%	35.7%

The correlation between faster economic growth and WTO or GATT membership is strongest among countries that joined in the 1950s and 1990s.[77] It is relatively weak among countries that joined in the 1960s and 1970s, and there is no such correlation for countries that joined in the 1940s and 1980s.[78]

Contrasting that with the general economic trends described above, the pre- and post-accession figures do correspond loosely with the pre- and post-1973 global economic climates. The figures for the countries that joined in the 1970s are relatively flat, with the 1950s and 1960s showing a strong sustained rate of growth, mirrored by the weakening rates of growth at the end of the century.[79] Therefore, these figures suggest that timing could be the most determinative factor in whether joining the WTO or GATT will offer a boost in growth rates.

This is not surprising. The WTO is merely a pillar of the global capitalist system. One would expect that member countries' fortunes would be more tied to the rise and fall of that overall system than one of that system's rule-making bodies. On the other

76. *See also infra* app. A.
77. *See supra* fig.11.
78. *Id.*
79. *Id.*

hand, if that is in fact the case, then any causal relationship between WTO membership and faster economic growth would be undermined. That there is a correlation is not in doubt.[80] But if a country's economic fate will follow a similar path regardless of whether it is part of the WTO or not, then in some circumstances membership would not be worth the steep concessions demanded as the price of admission.

V. CONCLUSION

This Study shows that there is a correlation between accession to the WTO or GATT and an increase in economic growth rates. However, those gains were not spread around equally to all countries. Rich countries grew faster than poor countries in the first decade after they joined, but poor countries did still have an average growth rate superior to the decade before membership. Geographically, countries in most regions of the world did experience greater economic growth after WTO accession than before. The exception to that rule is North American countries, which performed better in the ten years prior to WTO accession than in the ten years after. Eastern Europe saw the greatest gains, but this was in the context of the initial transition away from communism. Middle Eastern countries also experienced a large increase in growth rates after joining the WTO or GATT.

While it is valuable to confirm that this correlation exists, a causal relationship between WTO or GATT membership and increased economic performance cannot be inferred from this Study. First, it is conceivable that existing higher rates of growth induced countries to join the WTO and not the other way around. If so, then it could only be for other benefits not associated with this Study.

Second, any causal assertion is undermined, at least to some degree, by the results of the breakdown of accession date by decade. The general trends of growth before and after accession seem to roughly follow the larger macroeconomic trends of the twentieth century.

This is not surprising considering the large sample size of countries and the obvious fact that, WTO member or not, no trading nation exists outside of the world economy. Yet, if a country is going to drift along on the current of global economic change in largely the same manner regardless of its WTO membership status, then in some circumstances, a seat at the WTO table may not be worth the price.[81] While there are other considerations to joining the WTO,[82]

80. *See supra* fig.1.

81. This, however, is not my contention, nor is the data gathered in this Study alone enough to support this contention. To the contrary, it may be found

as it is primarily an economic and trade institution, policy makers and future studies may wish to delve deeper into what degree economic benefits come causally from membership and to what degree they do not. However, from this Study, it may be said that where WTO membership goes, increased wealth tends to follow.

Thomas H. Santoro*

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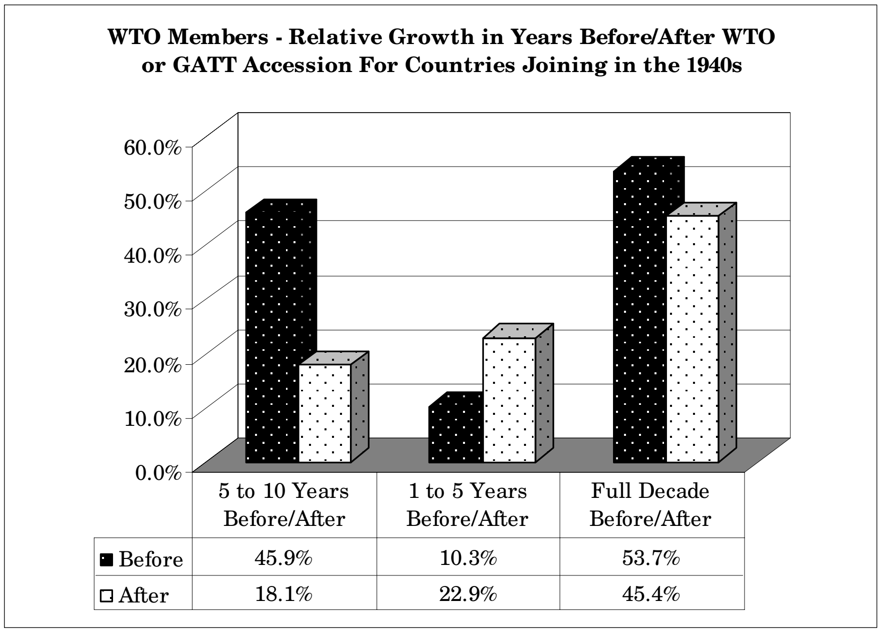
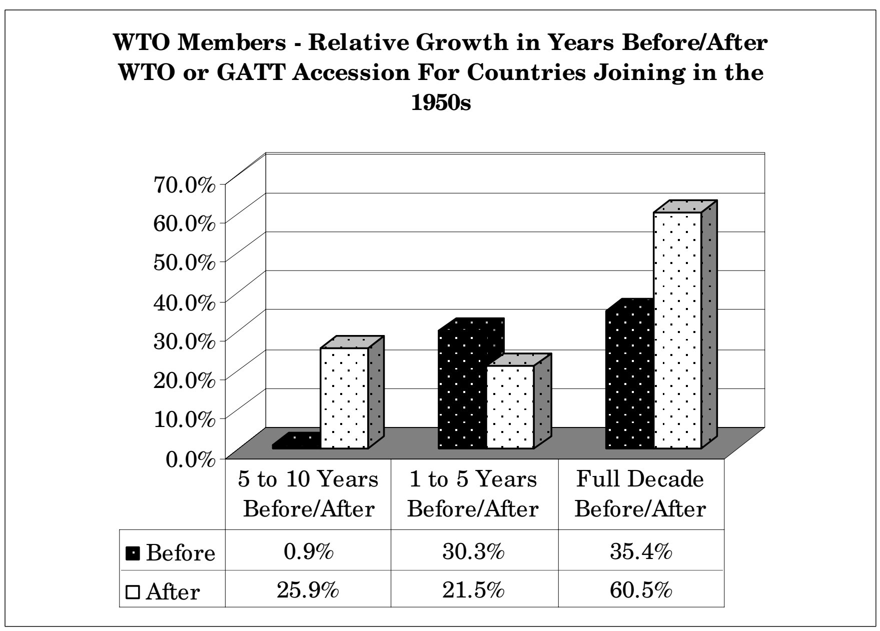
that the "concessions" sometimes demanded before a country is allowed to join the WTO may actually have a beneficial effect on a country's development in and of themselves.

82. *See generally* 10 BENEFITS OF THE WTO, *supra* note 4.

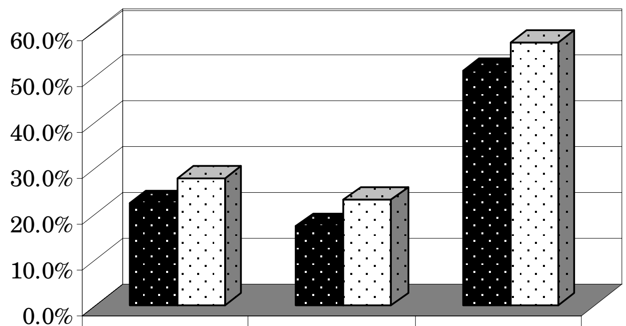
* Special thanks to Professor John H. Knox of the Wake Forest University School of Law, who helped conceive and design this project and mentored me throughout it. Thanks as well to Bob Herbert, the Babcock Business School librarian who guided me to the data, helped me understand it, and showed me how to make it usable. And finally, I thank Andrea Capellas for her help and support throughout this project.

APPENDIX A


WTO Members - Relative Growth in Years Before/After WTO or GATT Accession For Countries Joining in the 1940s
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
5 to 10 Years Before/After
1 to 5 Years Before/After
Full Decade Before/After
Before 45.9% 10.3% 53.7%
After 18.1% 22.9% 45.4%

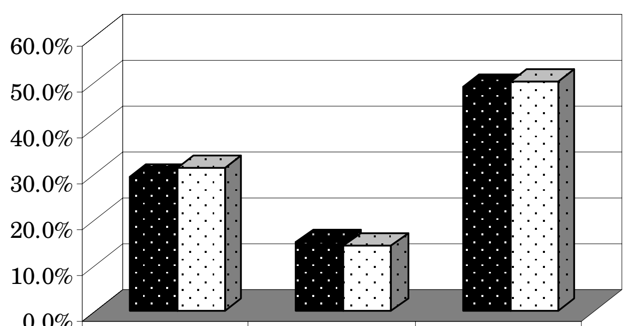

WTO Members - Relative Growth in Years Before/After WTO or GATT Accession For Countries Joining in the 1950s
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
5 to 10 Years Before/After
1 to 5 Years Before/After
Full Decade Before/After
Before 0.9% 30.3% 35.4%
After 25.9% 21.5% 60.5%

WTO Members - Relative Growth in Years Before/After WTO or GATT Accession For Countries Joining n the 1960s



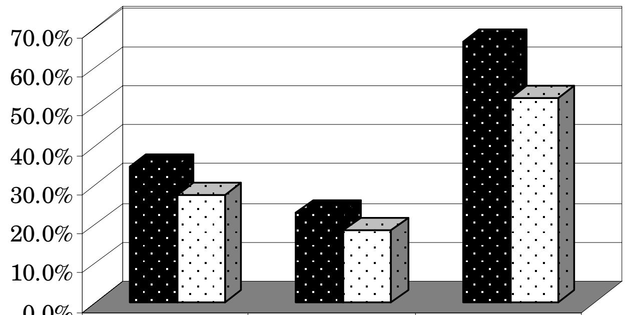
	5 to 10 Years Before/After	1 to 5 Years Before/After	Full Decade Before/After
■ Before	22.4%	17.6%	51.3%
□ After	27.8%	23.3%	57.6%

WTO Members - Relative Growth in Years Before/After WTO or GATT Accession For Countries Joining in the 1970s



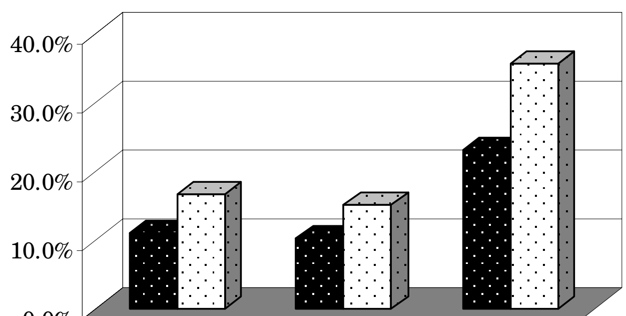
	5 to 10 Years Before/After	1 to 5 Years Before/After	Full Decade Before/After
■ Before	29.6%	15.0%	49.1%
□ After	31.4%	14.4%	50.3%

WTO Members - Relative Growth in Years Before/After WTO or GATT Accession For Countries Joining in the 1980s



	5 to 10 Years Before/After	1 to 5 Years Before/After	Full Decade Before/After
■ Before	34.7%	22.9%	66.5%
□ After	27.5%	18.4%	52.3%

WTO Members - Relative Growth in Years Before/After WTO or GATT Accession For Countries Joining in the 1990s



	5 to 10 Years Before/After	1 to 5 Years Before/After	Full Decade Before/After
■ Before	11.1%	10.2%	23.1%
□ After	16.7%	15.3%	35.7%