

The Importance of Latin America to U.S. International Trade
A Position Paper [§]

Stephen P. Coelen
Professor of Economics and Political Science
Director, MISER

Massachusetts Institute for Social and Economic Research
University of Massachusetts at Amherst

November 19, 1998

MISER has recently determined that it should expand its role in the acquisition and dissemination of trade statistics by augmenting its already strong database on U.S. trade flows with additional material on Latin America. But as we do this, we are sure our user audiences will ask why we would want to expand upon our substantial existing statistical base already provided to companies and public agencies interested in trade. Perhaps more seriously, our user audience might ask why Latin America?

A recent news item in a major Northeast newspaper citing high growth rates in exports to Latin America raised this question, stating that Latin America is not so important because it is a source for the loss of our domestic employment; because Latin America isn't interested in importing the high tech commodities that we want to export; and lastly, because we can't believe the data about the region.

Although the data are not easy to come by, when one seeks out the facts, the facts clearly contradict this news report. First, with regard to the potential loss of domestic employment from our entering into an FTAA agreement, we must recognize that in expanding the NAFTA agreements beyond Mexico, Latin America should be no different than Mexico was after the NAFTA agreements. We entered into NAFTA on January 1, 1994. Our national unemployment rate was then 6.9% and per capita personal income over the year preceding NAFTA was \$21,220. Now nearly 5 years into NAFTA, our unemployment rate is down to 4.5% and per capita income has grown by approximately 20%¹. The unemployment rate is at the point where, because of "frictional" unemployment, it can't fall much farther. And the income growth is nearly unparalleled over any previous five year span in history.

While there are those who would argue that these trends had nothing to do with Mexico and NAFTA, we would say that if it was the more general health of the economy or world trade that buoyed the U.S. economy through the implementation of NAFTA, then similar trends in the future will continue to buoy the U.S. economy, post FTAA. At worst, the shift in jobs caused by more open trade places a greater emphasis in the U.S. on higher paying and more technically advanced jobs. That, of course, is good so long as there is enough educational attainment to fuel persons to participate in a stronger U.S. economy. However, it also might be that Latin America will itself be the stimulus to continued U.S. growth. After all, Latin America is among the fastest growing markets in the world. We think that the U.S. should not overlook these possibilities.

On the basis of U.N. and InterAmerican Development Bank approved statistics, it is possible to demonstrate that Latin America is:

1. among the fastest growing markets in the world,
2. giving more ground to non-U.S. bilateral trade partners than to the U.S.,
3. considerably larger in potential volume than just Mexico, and

¹ Data on U.S. unemployment and income are from the U.S. Dept. of Commerce's Bureau of Economic Analysis and Labor Statistics. Income growth reflects the shifts between 1993 annual and the first two quarters of 1998; unemployment, the shifts between 1993 annual and the first three quarters of 1998, all seasonally adjusted.

4. absorbing significant amounts of high tech products.
We have developed several figures which illustrate these points.²

1. Latin America as a Fastest Growing Market

The Department of Commerce introduced the idea that U.S. businesses should concentrate on the BEMs of the world—the big, emerging markets. Among them, without proof that the area was *either* big *or* emerging, was Latin America. Yet, upon careful review of U.N. statistics,³ we see that Latin America absorbs more than \$362.9 billion in exports from around the world, more than 56.4% of the U.S.'s total exports to all destinations. Clearly, Latin America is a big enough market for the U.S. to be concerned about!

With regard to growth, consider that in the most recent five year period for which the U.N. has data available, the U.S. growth in exports to Latin America was 51.1%. To the rest of the world, the U.S. growth rate was only 45.2%. These two growth rates are much closer to each other than, in fact, the growth rate differential between exports of non-U.S. origin to Latin America versus the rest of the world. Abstracting from U.S. shipments, the growth in exports originating from everywhere other than the U.S. to Latin America was 64.6%. The growth rate in exports originating from everywhere other than the U.S. to non-Latin America was, by contrast, only 38.1%. These data are shown in **Figures 1 and 2** which plot exports originating from the U.S. on the ordinate and exports originating from the rest of the world on the abscissa. The green average growth rate triangle, represents the average growth rate of exports to Latin America from the U.S. and from the rest-of-world. This lies beyond (northeast of) the red average growth rate triangle, representing the U.S. and rest-of-world average growth to non-Latin America.

Additionally, **Figure 1** shows that the majority (63.6%, 14 of 22 reporting countries) of Latin American countries had growth rates in absorbing U.S. exports which were higher than the U.S. average growth worldwide. By comparison, a minority (45.3%, only 24 of 53) of non-Latin American countries absorbed U.S. exports at rates above the U.S. worldwide growth rate.⁴ More to the point, 54.5% (12 of 22) of the countries in Latin America absorbed exports faster from countries other than the U.S. than from the U.S.—these portrayed by the red dots above/below the 45 degree line separating countries in which sales of U.S. products grew faster (above the line) or slower (below) than non-U.S. products.

² These figures are at times quite complex, and therefore, they are presented with a short explanation of how to interpret them and what their major conclusions are. Discussion of the figures in the text presumes that the reader will have understood the various figures and does not replicate this explanation.

³ These include only 22 Latin American countries and 53 non-Latin American countries because of reporting difficulties (primarily within the smaller countries) and because of differences in organization between 1992 and 1996, the five most current years available in the U.N. data base. The latter primarily excludes new, politically created or eliminated countries like the Newly Independent States (NIS) of the former Soviet Union.

⁴ The conclusions in this and the preceding sentence derive from evaluating the number of points (of which, each represents a specific country) which fall above/below the red horizontal line, representing the average of U.S. export growth to everywhere—i.e., the world.

For each country reported in U.N. statistics, Figure 1 compares the growth rate of U.S. shipments to it (the Y axis) with the growth rate of world shipments to it (the X axis). This shows whether the U.S. is keeping pace with world competitors in specific competition within each of the countries. Points above the green 45 degree diagonal represent countries to which U.S. exports have grown faster than world exports; points below the diagonal, countries to which U.S. exports have not kept pace.

Destination countries are not labeled by name but are color coded--Latin American countries: red, the rest of the world: blue.

Additional benchmarks are shown in the red and blue dotted lines, representing U.S. and world growth rates to all destinations. These are known percentages against which any country's growth can be compared, determining whether the world and/or U.S. growth to it is greater/or/less than the benchmarks.

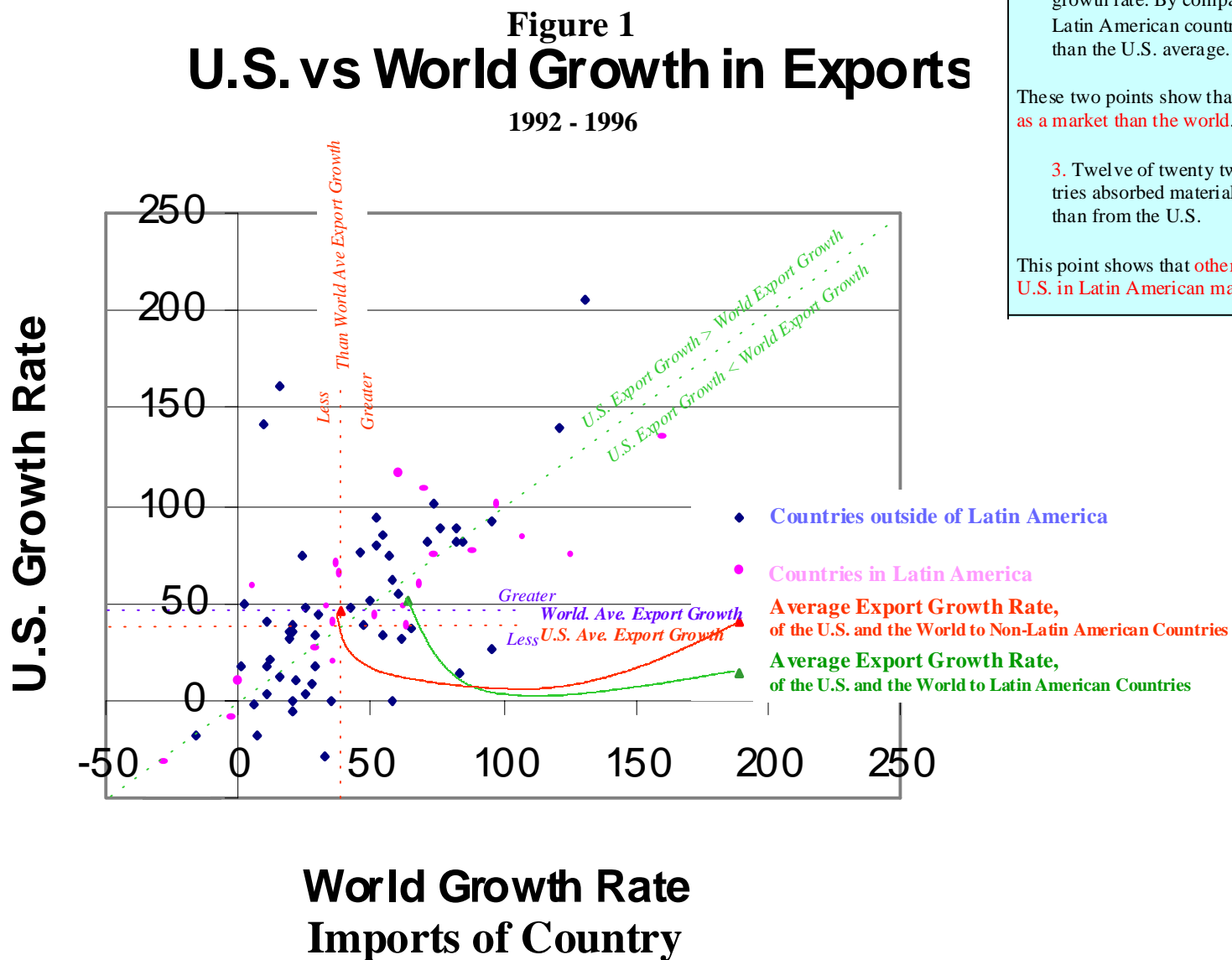
1. both the U.S. and the rest of the world grew faster with regard to Latin American markets than to non-Latin American markets (the red triangle lies south-west of the green triangle, representing respectively U.S. and world growth to Non-Latin America and Latin America).

2. Fourteen of twenty two (63.6%) Latin American countries absorbed U.S. exports faster than the U.S. average growth rate. By comparison, only 24 of 53 (45.3%) non-Latin American countries absorbed U.S. exports faster than the U.S. average.

These two points show that **Latin America is growing faster as a market than the world.**

3. Twelve of twenty two (54.5%) Latin American countries absorbed materials from the rest of the world faster than from the U.S.

This point shows that **other world countries are out-pacing the U.S. in Latin American markets.**



**World Growth Rate
Imports of Country**

Figure 2: U.S. vs World Growth in Exports

1992-1996

Interpretation of Figure 2:

Figure 2 repeats the axes of Figure 1 and therefore compares for each of the Latin American countries reported in the U.N. statistics the growth rate of U.S. shipments to it (the Y axis) with the growth rate of world shipments to it (the X axis). See the interpretation given in Figure 1.

Destination countries are labeled by name and show proportionately the size of 1996 world export flows to the country by the size of the representative circle.

The main conclusions of Figure 2 are:

1. Figure 2 shows countries which are:

existing champs--countries which meet two criteria: the U.S. growth exceeds our average growth rate to non-Latin American countries (lies above the dotted blue line on the graph *and* the U.S. growth exceeds the world growth to the country (lies above the dotted green line).

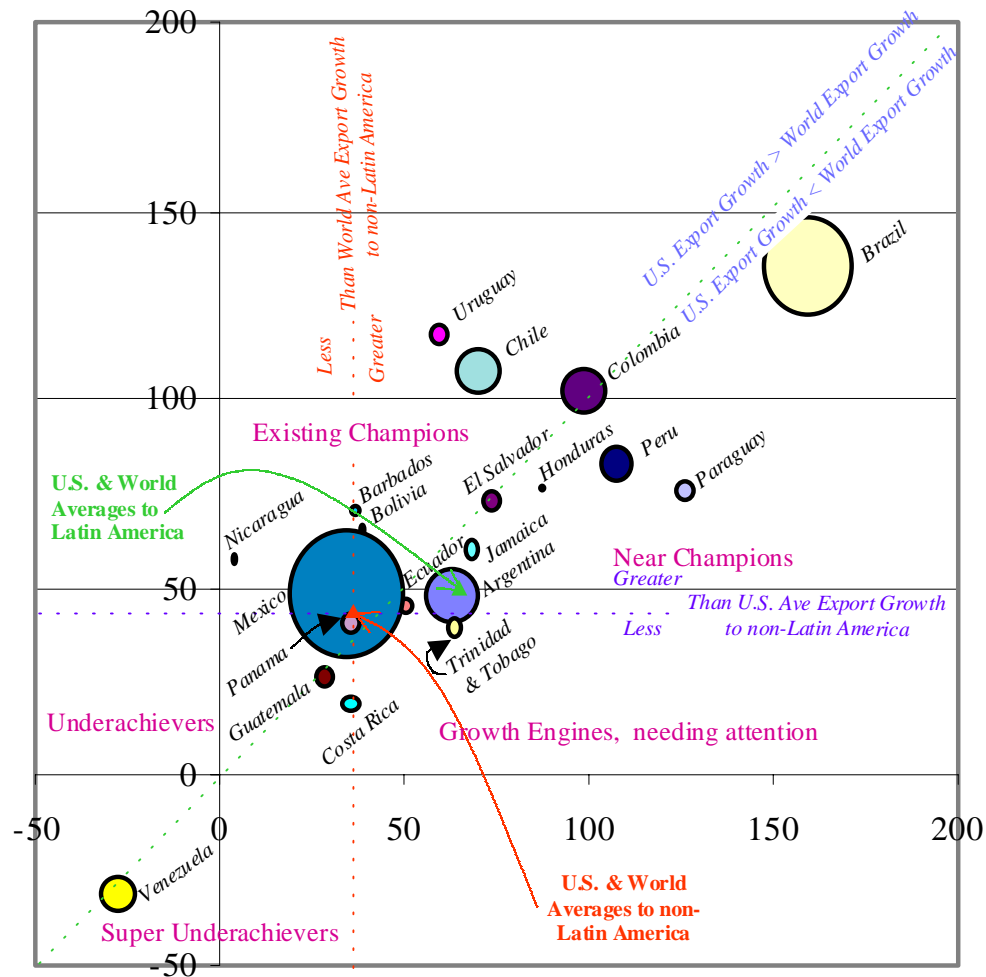
near champions--countries to which U.S. growth exceeds our average growth rate to non-Latin American countries *but* to which our growth is less than world growth to the country.

growth engines, needing attention--countries to which our growth is less than our average to non-Latin American countries *but* to which our growth was greater than world average growth.

underachievers and super-underachievers--countries to which our growth falls short of U.S. and world average growth rates *and* to which our growth may be slower than world growth (the latter distinguishing the super-underachievers from the mere underachievers).

2. Most Latin American countries do not underachieve, but we should move many countries from near champions to existing champions.

U.S. Growth Rate



World Growth Rate imports of country

Figure 2 repeats material from **Figure 1**, highlighting the details about individual Latin American countries and showing the size of 1996 imports by the circle's area. We have labeled areas on **Figure 2** so as to indicate the relative opportunities for U.S. exporters. This sets out countries which are:

- Existing champions to which the U.S. export growth rate exceeds both the U.S. average export growth rate to non-Latin America *and* the country-specific world export growth rate,
- Near champions to which the U.S. export growth rate exceeds the U.S. average export growth rate *but* fails to exceed the country-specific world export growth rate,
- Growth engines needing attention to which the U.S. export growth rate is greater than the world average rate *but* lower than the U.S. average rate, and finally
- Underachievers and super-underachievers to which the U.S. export growth rate is below the U.S. and world average rates, these conceptually distinguished by whether actual U.S. growth to the country exceeds or falls short of world growth.

There are very few Latin American countries in the underachieving class: Guatemala, Costa Rica, Panama, and Venezuela (as well, Belize, and St. Lucia which do not appear on **Figure 2** because of their very small size) . However, one sees the obvious clarity in urging U.S. exporters to pay more attention to the near champions, countries such as Brazil, Paraguay, Peru, Honduras, Jamaica, Argentina, and Ecuador (especially Brazil and Argentina, given their existing size). These countries have absorbed our exports at a pace growing as fast or faster than the U.S. export average, but in none of these countries did we grow as strongly as the rest of the world. *These* are examples of country markets to which the U.S. needs to pay more attention—they are places where we are being out-paced by our world competitors for market share.

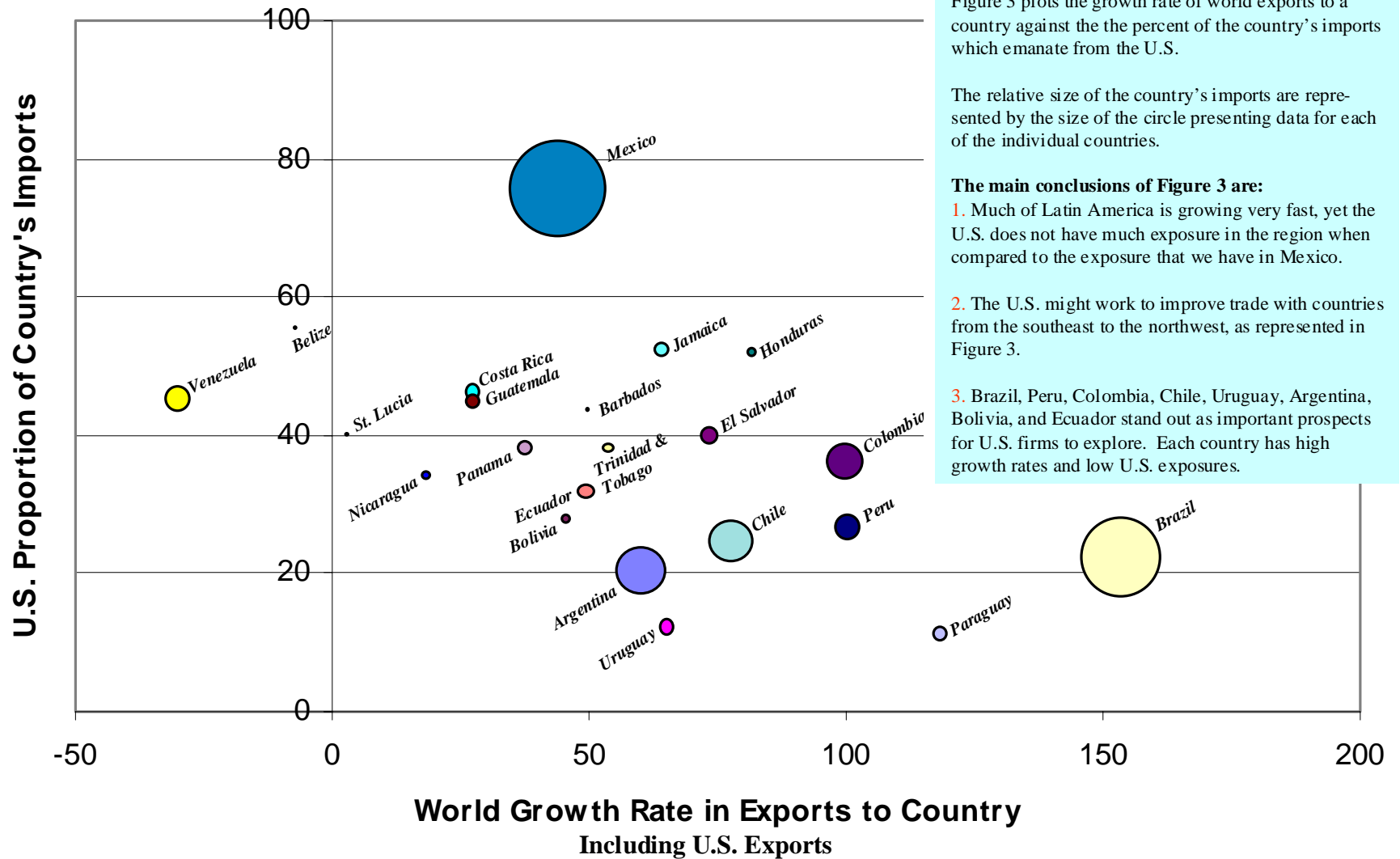
2. The Loss of U.S. Position Relative to Other Bilateral Partners in Latin America

U.S. market shares accurately reflect our trade position within Latin America. **Figure 3** highlights a ratio indicating the U.S. export percentage of the stream of goods entering each of the Latin American countries from abroad. It shows that we are already heavily invested in Mexico where U.S. products represent more than 75% of all of the goods coming into the country.

We should pay closer attention to Brazil—a very large country measured by its imports, but growing at a much greater rate than Mexico and with relatively little existing U.S. presence. U.S. exports represent only 27% of all of the goods entering Brazil. We should be interested in specific countries in the Latin American market almost in the order of their appearance from the Southeast to the Northwest on **Figure 3**.

Figure 4 shows the countries in Latin America in which we are increasing our presence (those above the 45° line) and those in which the percent of the import stream which comes from the U.S. is decreasing (those below the 45° line)—the size of the circle is

**Figure 3: Latin American Export Markets
1992-1996**



Interpretation of Figure 3:
 Figure 3 plots the growth rate of world exports to a country against the the percent of the country's imports which emanate from the U.S.

The relative size of the country's imports are represented by the size of the circle presenting data for each of the individual countries.

The main conclusions of Figure 3 are:

1. Much of Latin America is growing very fast, yet the U.S. does not have much exposure in the region when compared to the exposure that we have in Mexico.
2. The U.S. might work to improve trade with countries from the southeast to the northwest, as represented in Figure 3.
3. Brazil, Peru, Colombia, Chile, Uruguay, Argentina, Bolivia, and Ecuador stand out as important prospects for U.S. firms to explore. Each country has high growth rates and low U.S. exposures.

**Figure 4: Change in U.S. Export Proportion in Latin American Markets
1992 - 1996**

Interpretation of Figure 4:

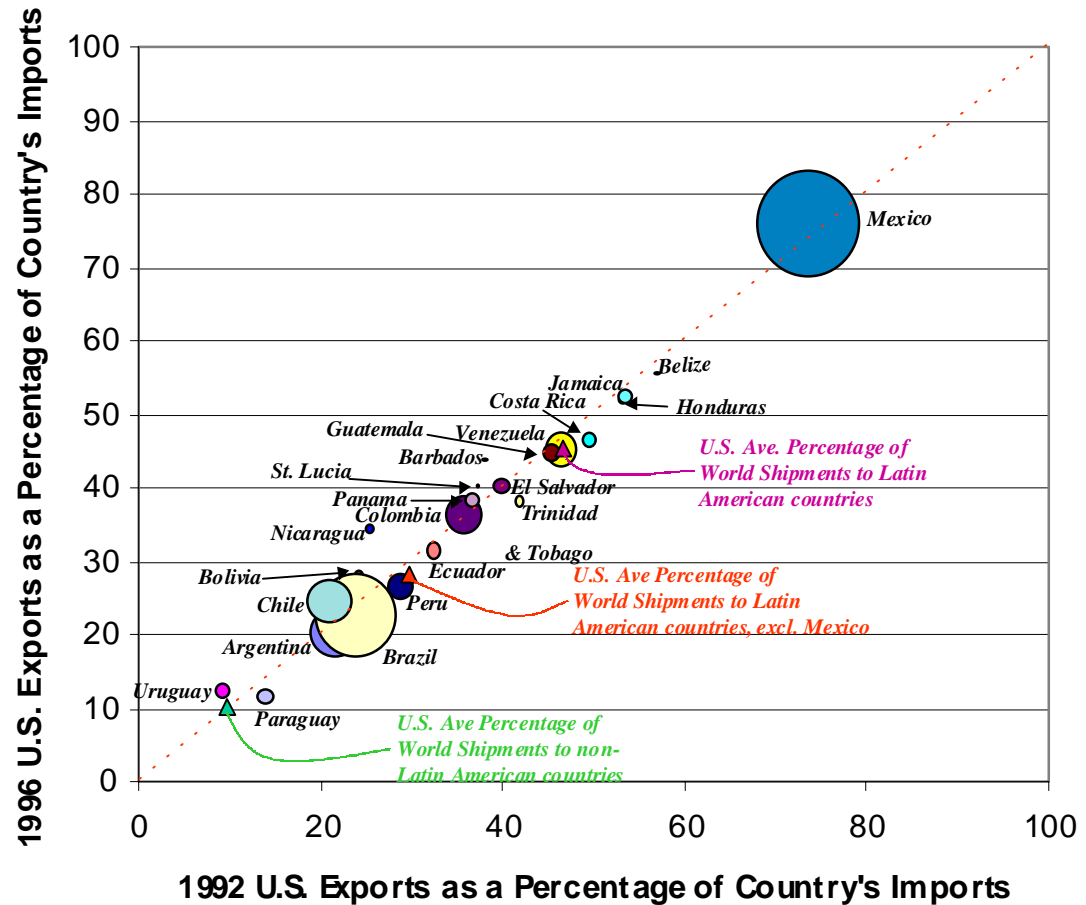
Figure 4 compares the 1992 and 1996 percentages which U.S. exports represented of each country's imports. By drawing a 45 degree diagonal, the reader can see in which countries the U.S. has experienced the largest shifts in market share. Countries represented by circles above the diagonal are ones in which the 1996 U.S. share increased compared to the 1992 U.S. share, and vice versa.

Countries further from the graph's origin along the diagonal are ones to which we have had greater persistent market exposure in comparison to countries closer to the origin.

What appear to be small shifts away from the 45 degree diagonal may actually represent very large losses (gains) in potential sales due to loss (gain) in market share, see conclusion 4, below.

The main conclusions of Figure 4 are:

1. The U.S. has lost share with regard to most countries in Latin America. Only with regard to Uruguay, Chile, Bolivia, Panama, Columbia, St. Lucia, El Salvador, the Barbados and Mexico have we gained share.
2. The U.S. average share outside of Latin America is smaller than to each of the countries in the region (the green triangle compared to all circles on the Figure). Furthermore, our market share has not changed with regard to our non-Latin American markets.
3. In Latin America, however, we are losing share on average throughout the region and this is independent of the influence of Mexico (both the red and purple triangles lie below the diagonal).
4. The loss of exports to countries in which we do not maintain our market share (where the circle is on or above the diagonal) can be great. With regard to Brazil, for example, which seems to be barely below the diagonal, the U.S.'s failure to grow at world rates between 1992 and 1996 is enormous--\$3.2 billion.



again the size of the world exports in 1996 to each of the countries. Data contained in **Figure 4** are consistent with the notion that the rest of the world's growth in Latin America exceeds our own. Almost all of the Latin American countries lie below the 45° line. Only in Uruguay, Chile, Bolivia, Panama, Colombia, St. Lucia, El Salvador, the Barbados and Mexico (9 of the 22, or 41% of the Latin American countries) did the U.S. send a higher percentage of the total import stream to Latin American in 1996 than in 1992. This implies then, for example, given a high rate of growth in Brazil coupled with modest U.S. trade activity, that the U.S. failure amounts to a significant loss of ground in partnering within Brazil compared to our competitors in Japan and the EU. If we had simply held our own in Brazil at the world average growth rate, our export stream would have been \$3.2 billion higher in 1996 than otherwise. We must become more strategic in evaluating the potential of our export markets so as not to be frozen out over time.

3. Mexico as an Important Segment of Latin America, with Emphasis on “Segment”

With regard to the question of whether Latin America represents more than just Mexico, **Figure 5** shows that Latin America represents the destination for 17% of U.S. exports. Within this slice of the U.S. export pie, Mexico is 60% of the U.S. market in Latin America, but there still remains the 40% market share in other Latin American countries, countries which are generally growing faster than Mexico. And **Figure 6** shows that for the other countries of the world, Canada and those who are not situated in our hemisphere, there is a much more even pattern of trade in Latin America—Mexico absorbs only 36% of the world's exports which are shipped to the region. We are not discounting the importance of the Mexican market to the U.S.; however, we should not overlook the rest of our Latin American neighbors further south, a form of myopia which could cost the U.S. multimillion dollar sales opportunities if we don't overcome it!

4. The Diversity of Latin American Imports

Figures 7A and B present data developed by MISER from U.S. and European Union (EU) sources, showing the commodity diversity among U.S. and EU exports to Latin America. They show that the answer to the question of whether Latin America would be of export interest to producers of technologically sophisticated commodities is emphatically YES! More than \$73.8 billion of U.S. and EU exports, almost 52% of our total exports to Latin America, fall into the broad classifications of:

- Vehicles, Aircraft and Transport Equipment,
- Optical, Medical and Measuring Equipment,
- Machinery, Mechanical Apparatus and Electrical Equipment, including computers, and
- Miscellaneous Manufactured Articles

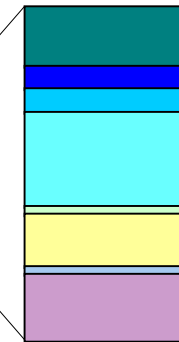
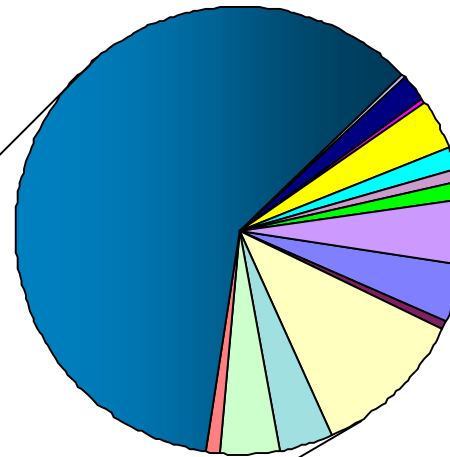
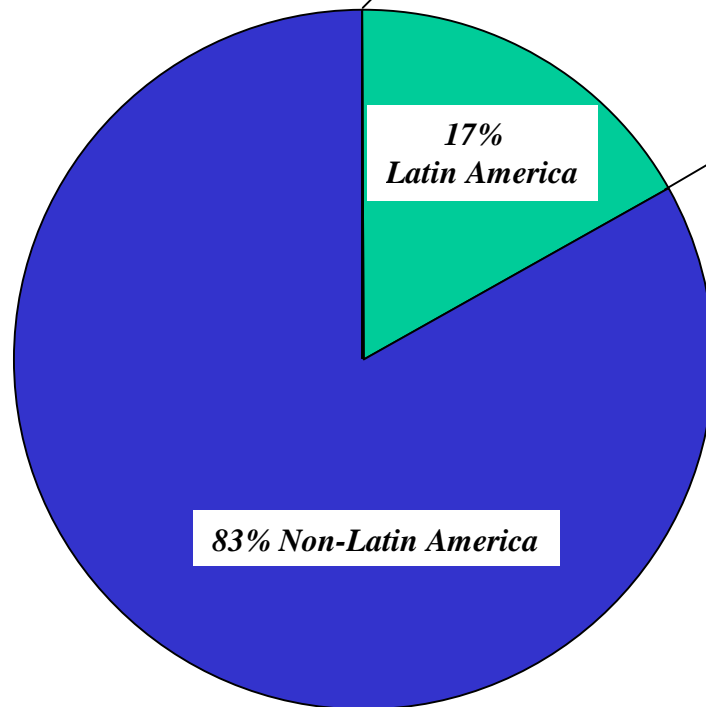
Figure 7A shows that the U.S. portion of the U.S./EU total, always high because of our proximity to the region, is the smallest in the largest two categories of specific shipments, vehicles and machinery. The U.S. ships only 61.3% of the U.S./EU total of vehicles from the two areas reaching Latin American markets. Further, when we consider that shipments from Japan are not included in the exports represented in **Figure 7A**, shipping

Figure 5: Latin America as Export Market for the U.S.,

Interpretation of Figure 5:

Figure 5 focuses only on U.S. exports: to the world generally and to Latin America specifically.

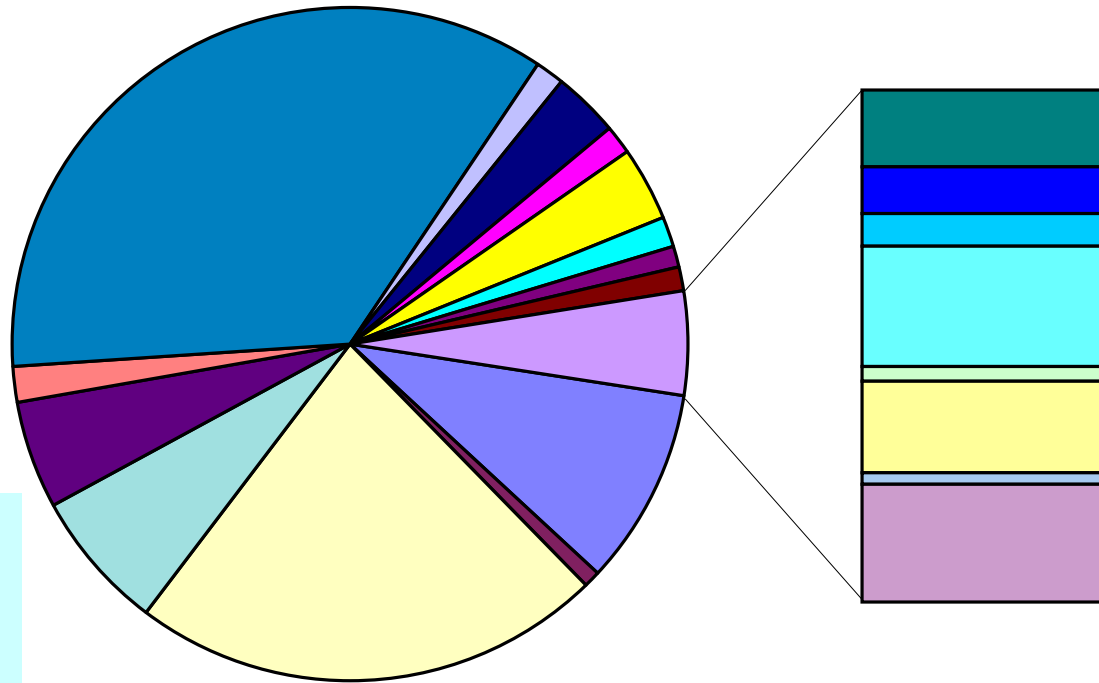
The largest circle shows the breakout of U.S. exports to Latin America and other world destinations. The smaller circle breaks out the Latin American piece into its component parts. Finally, the bar breaks out Latin American countries not otherwise enumerated on the mid-sized circle.



The main conclusions of Figure 5 are:

1. Of world export markets, Latin America already represents a significant portion of the destinations of U.S. exports.
2. There are many questions such data raises. Wouldn't we like to know, for example, a little more about the following:
 - a. why has the rest of the world been gaining strategic advantage over us in Latin America?
 - b. could we have maintained a stronger export position in Latin America in recent years if we had had a stronger initial base there?
 - c. what commodities are most wanted in Latin America?
 - d. who is providing these commodities for Latin America now?
 - e. why outside of Mexico, our closest neighbor, do we only provide 27% of all the goods which Latin America imports?

**Figure 6:
Latin America as Export Market for the World, 1996**



Interpretation of Figure 6:

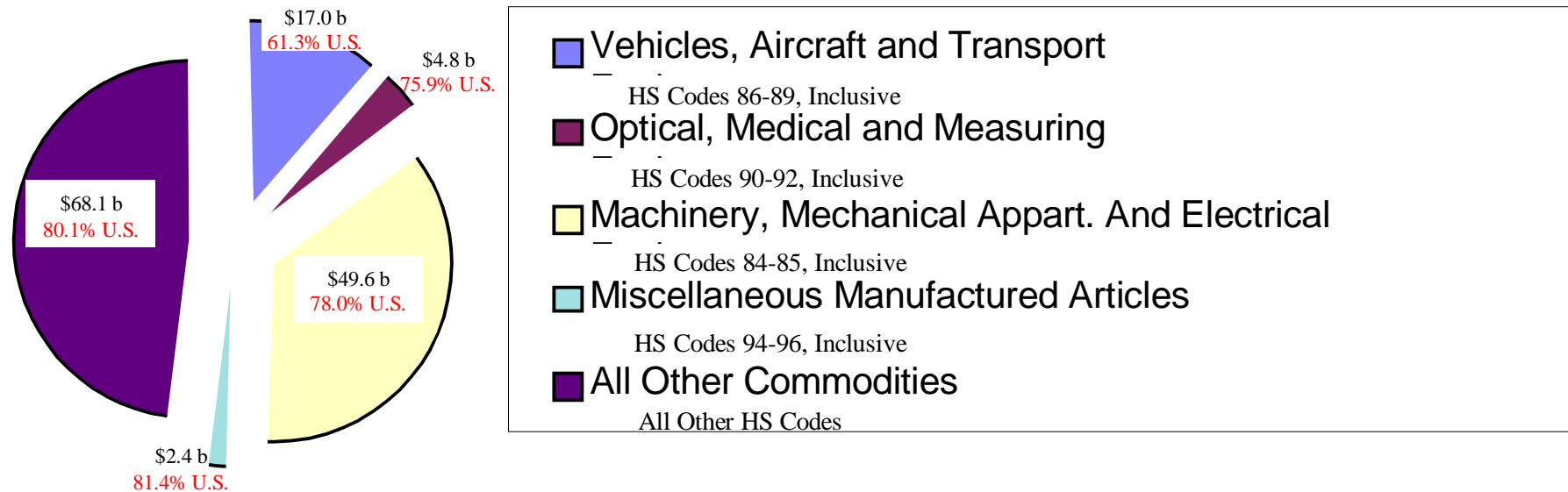
Figure 6 duplicates Figure 5, except that it presents world exports going to Latin America.

The main conclusions of Figure 6 are:

1. While Mexico is still important to world exporters, it is not as dominant in the world's portfolio as in the U.S.'s.
2. Brazil, followed by Argentina, Chile and Colombia are also large world export destinations.

Figure 7A: Commodity Variety of U.S. and EU Exports to Latin America

1996



Interpretation of Figure 7A:

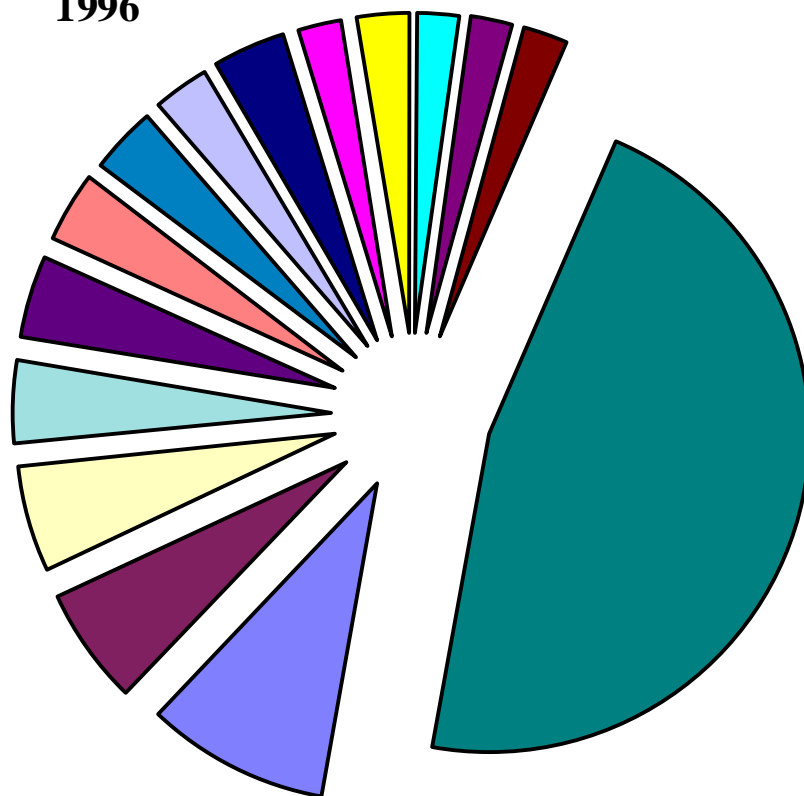
Figure 7A shows aggregate commodity flows from the U.S. and the EU into Latin America. We have taken flows at a basic two digit level, then further aggregated these to the levels shown in the legend of Figure 7A. These represent the entirety of flows from the U.S. and the EU into Latin America while still showing small dominant groupings of from the high tech/automated manufacturing processes.

The total value of the combined U.S./EU export stream is shown in \$ U.S. The percentage for each pie slice represents the U.S. portion of the U.S./EU total.

The main conclusion of Figure 7A is:

1. A great portion of the exports to Latin America, more than 50%, come from processes associated with vehicles, optical, medical and measuring equipment, and mechanical apparatus, and electrical equipment--the stuff which can sustain a U.S. high wage, living standard.

Figure 7B: Commodity Variety in the detailed U.S. and EU Export Stream to Latin America 1996



- PARTS & ACCESSORIES FOR MOTOR VEHICLES (HEADINGS 8701 -8705)
- AUTOMATIC DATA PROCESS MACHINES, ETC
- LOW VALUED EXPORTS, valued at under \$ 2501
- PARTS FOR TYPEWRITERS & OTHER OFFICE MACHINES
- OIL (NOT CRUDE) FROM PETROL & BITUM MINERAL ETC.
- ELECTRONIC INTEGRATED CIRCUITS & MICROASSEMBLY, PARTS
- PARTS FOR MACHINERY (HEADINGS 8425 TO 8430)
- INSULATED WIRE, CABLE; OPTICAL SHEATH FIBER CABLES
- MOTOR CARS & VEHICLES FOR TRANSPORTING PERSONS
- TRANSMISSION APPARATUS FOR RADIOTELEPHONY; TV CAMERAS
- AIRCRAFT, POWERED; SPACECRAFT & LAUNCH VEHICLES
- THERMIONIC, COLD CATHODE OR PHOTOCATHODE TUBES, PT
- ELECTRIC APPARATUS FOR LINE TELEPHONY, PARTS
- ELECTRICAL APPARATUS FOR SWITCHING, NOT OVER 1 000 V
- SUM OF ALL OTHER EXPORTS

Interpretation of Figure 7B:

Figure 7B represents a partial drilling down into our data base on U.S. and EU exports to show more detail of the kinds of commodities which Latin America imports. It represents the current flows of the top 14 commodities, at a four digit HS of disaggregation, going from the U.S. and EU into Latin America for 1996.

The main conclusions of Figure 7B are:

1. The most specific commodity flows include such shipments as computers and computer equipment, cars and aircraft as well as components and parts for motor vehicles, office equipment, and other industrial machinery.
2. The many commodities which Latin America imports include many produced from the high technology, high wage processing fields--the international fuel for continuing U.S. growth.

75.9% of optical, medical and measuring equipment and 78% of the category of machinery, mechanical apparatus and electrical equipment—the category which includes computers and peripherals for computers, may also be disappointingly low. These are the types of exports which the U.S. is interested in shipping. These exports represent the high value, mechanized production associated with high wage manufacturing—a source of the standard of living to which the U.S. aspires.

Figure 7B shows the composition of the export stream to Latin America at a more detailed, four digit harmonized classification level. While this level is still not detailed enough to satisfy the demands of actual producers and exporters who want to find details about their markets, the data shows the top 14 categories of shipments into Latin America. Computer (automatic data processing) equipment, cars and aircraft are all in the list, along with component parts...of motor vehicles, of office machine equipment, of other industrial machinery, etc. Overall, the amount of low value shipments to Latin America is quite large. This presents a strong case that Latin American markets are apt for being served by the U.S.'s small producers and exporters who might bring parts and components into the Latin American markets for direct retail sale (low value shipments often include this category), repair of existing equipment, and/or final assembly into finished products (sourcing).

Summary

The primary thrust within MISER's expanded international trade data is to present detailed data on the subjects explored in this paper although they are being explored in this paper only at aggregate levels. We think that **Figures 1** through **6** make an extremely strong case that the U.S. government and the private sector in the U.S. need to focus on *world* exports in markets around the world. The case as presented in **Figures 1** through **6** has been made only with reference to export totals, without regard to shipments by commodity classification.

Imagine what an exporter would do with data on world export markets by detailed commodity classifications, like those underlying **Figures 7A and B**, in this fastest growing part of the world. However, even **Figures 7A and B** show only limited commodity detail for the region. An exporter wanting to break into the Latin American market would want to have data on commodity imports for each country in the region from each country in the world. This is what we are working to produce in a partnership with INTAL, an Argentinean research institute sponsored by the Inter-American Development Bank. Together, we shall be able to bring more data on imports (and exports) of the region to light for U.S. exporters. Do we want to wait so long for such data that it won't matter any more when we finally get them—we'll have by then waited too long? We at MISER think not.

[§] This paper has been prepared primarily by Stephen Coelen, but it couldn't have been done without the significant data contribution of Carla Miller and additional technical or editing support of Noel Yu, Kathleen Charles and Linda Downs-Bembury, all members of the Institute.