

Chapter I. Summary of Findings and Introduction

1. Introduction

A central factor in determining the future of Central America will be the ratification and implementation of DR-CAFTA, the free trade agreement negotiated by Costa Rica, the Dominican Republic (DR), El Salvador, Guatemala, Honduras, and Nicaragua, with the U.S.. This is an important issue, not only because the U.S. is these nations' major trading partner, but also because the treaty holds the potential of increasing trade and investment in the region, which in turn is key to lifting economic growth and improving the welfare of the people of Central America and the DR, including those living in poverty.

This report provides a preliminary assessment of DR-CAFTA, with particular attention to three key themes: (i) expected trade and non-trade benefits, (ii) actions that Central American countries need to pursue to capitalize optimally on the new opportunities, and (iii) identification of the population groups that may require assistance to adapt to a more competitive environment. The report focuses on the developing countries of Central America, namely Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua.¹

Past experience demonstrates that predicting the precise effects of any free trade agreement is always difficult. However, this report draws upon a number of different approaches and methodologies to reach the conclusion that DR-CAFTA is likely to improve growth levels for the participating countries in Central America and the DR, due to the expected positive effects on trade and investment levels. Greater trade levels will arise due to the removal of virtually all tariff and quota barriers to trade among all parties, consolidating – and in some cases expanding – the preferential market access that Central American countries have enjoyed in U.S. markets through the Caribbean Basin Initiative (CBI) program. DR-CAFTA is also expected to deepen regional trade integration (and increase trade levels) among the Central American nations themselves and with the Dominican Republic. DR-CAFTA should additionally promote greater levels of foreign and domestic investment, by improving the certainty of these countries' market access with the U.S., solidifying the broad economic reforms of recent years and spurring further reform efforts. Investors should respond positively to the modernization of key regulations in such areas as trade in services, government procurement and intellectual property rights, – including provisions for greater transparency in government regulations – which will be made more credible under DR-CAFTA commitments.

At the same time, the report's analysis of the gains from trade suggest that, as has been found with other trade agreements, these gains will depend on the ability of the Central American economies to successfully adjust to the changes that the agreement will bring (including changes in relative prices) and to handle effectively the ensuing restructuring of the economy. Hence, the magnitude of the benefits from DR-CAFTA will depend critically on the ability of

¹ Analysis of the effects of DR-CAFTA on the economy of the Dominican Republic can be found in World Bank (2005a and 2005b).

the Central American economies to pursue a complementary policy agenda, as the agreement's benefits can lead to substantial developmental gains if it is accompanied by parallel efforts in areas like trade facilitation (e.g., ports, roads, and customs), institutional and regulatory reforms, and innovation and education.

The analysis presented in the report shows that the vast majority of the population in Central America is likely to experience welfare gains from implementation of DR-CAFTA, even in the short run. At the same time, the removal of trade barriers in sensitive agricultural crops could adversely affect a small share of the population living in rural areas in Central America. Although provisions in DR-CAFTA will allow for long timetables in reducing tariffs for most sensitive products, appropriate support programs may need to be designed. In addition, selective investments in education, rural infrastructure, rural finance, and technical assistance will be required to ensure that the rural poor have the means to take full advantage of the new opportunities arising out of DR-CAFTA.

The rest of this summary reviews the main findings of the chapters of the report in the order in which they appear. Chapter II places DR-CAFTA in the historical context of the economic reforms that Central American countries have been undertaking since the late 1980s. Chapter III provides a summary overview of the recently negotiated DR-CAFTA, with special attention on the extent to which the agreement's provisions would significantly change market access for Central American goods and services, and also on how far they could be expected to consolidate prior reforms. Chapter IV reviews various analyses that assess the potential impacts of DR-CAFTA on the developing countries of Central America. Chapter V focuses on the identification and quantification of potentially affected populations from the easing of trade restrictions in sensitive agricultural products and analyzes policy options to assist vulnerable groups. Chapter VI reviews evidence related to key macroeconomic implications of DR-CAFTA, namely the potential revenue losses that might be produced by the removal of import taxes and the treaty's potential effect on the patterns of business-cycle synchronization. Chapter VII reviews evidence from each Central American country in the areas of trade facilitation, institutional and regulatory reforms, and innovation and education, in order to identify key priorities for the complementary agenda for DR-CAFTA.

2. Is DR-CAFTA the End of the Road?: Trade and Development in Central America Since 1990

Chapter II provides a description of the wide-ranging unilateral and regional trade reforms that Central American nations have pursued since the late 1980s. Tariffs have been slashed and most non tariff barriers have been removed. Regional agreements have been revitalized and countries have engaged in the expansion of trade markets through the negotiation of bilateral trade agreements. The CBI preferences granted by the U.S. have also opened important opportunities, especially in the development of new *maquila* exports.

However, these impressive achievements in the trade policy area have yielded mixed economic results. On the one hand, export volumes have increased, and some diversification has occurred, as demonstrated by the appearance of new exports -- including the impressive growth of *maquila* in most Central American countries and high technology goods in Costa

Rica. These are positive developments, because – among other considerations – exporting sectors have been shown to provide higher wages and improved working conditions compared to other areas of the economy.

At the same time, while trade has made a significant contribution to growth in Central America since 1990, its impact has not been sufficient to lift aggregate growth rates enough to transform these countries' economies and radically reduce poverty rates. Nor have trade opportunities by themselves served to offset some of the constraints to progress in the region, such as the still inadequate progress in improving infrastructure, education and governance, or continuing vulnerabilities in areas of macroeconomic and financial management that continue to add to investors' uncertainties in some of the countries. Beyond this, the new *maquila* industries have only developed a limited degree of integration with the local economies, while textile and apparel export prospects are still fragile due to the growing competition from Asian competitors. Although the diversification of Central American countries' exports has increased, this tendency partly reflects negative trends during the period, such as the decline or stagnation in exports of traditional commodities such as cotton, coffee and bananas. Ironically, while Honduras has achieved the highest degree of trade openness relative to its level of income, it is also the country with the weakest record of growth in Central America since the early 1990s.

Why these mixed results? As noted earlier, trade policy is unfortunately not the only determinant of trade (or growth) outcomes. There are still many obstacles to further export growth and trade diversification in Central American nations, including poor infrastructure, weaknesses in labor skills, inflexible regulations, trade barriers in other markets, deficiencies in governance (e.g., corruption, inefficient customs), and macro-fiscal and financial market vulnerabilities.

DR-CAFTA certainly caps the decade and a half of reforms in Central America, particularly in the trade area. It offers a great opportunity to make further progress in fostering trade-led growth. Yet it should not be seen as a silver bullet. On the positive side, it is a potentially more useful tool than the combination seen so far of unilateral removal of trade barriers and trade preferences, as it effectively guarantees long-term market access to the largest trading partner and locks in the reforms of recent years, boosting credibility and attracting investment. However, DR-CAFTA alone should not be expected to unleash radically higher levels of trade and growth, for the same reasons that trade policies since the early 1990s obtained only limited results. Countries will need to accompany DR-CAFTA implementation with policies to address key constraints and bottlenecks in order to reap the full social and economic results of this initiative, as will be justified in more detail in Chapter IV of this report and illustrated by the identification of certain country-specific elements of the complementary agenda in Chapter VII.

3. The Content of DR-CAFTA: Implications for Market Access and Domestic Reforms

Chapter III provides an overview of the recently negotiated DR-CAFTA, concentrating on the extent to which the agreement's provisions would significantly change market access for Central American goods and services, and also on how far they could be expected to

consolidate prior reforms and/or spur further domestic reforms in Central American countries. The overall assessment presented in the chapter is that, on both fronts, the answers are broadly positive, suggesting that DR-CAFTA should be expected to have a positive impact on trade flows and investment.

On market access, DR-CAFTA would consolidate and expand the current generous access that Central Americans currently enjoy to the U.S. market, while extending broadly reciprocal access for U.S. goods to their own markets. The benefits offered under the CBI would be locked in for Central American countries, and some additional permanent duty free access would be obtained for goods that had been previously exempted from CBI preferences. Other significant results would include the flexibilization of rules of origin for textiles and apparel, as well as commitments to help producers meet sanitary and phytosanitary standards required for the entry into the U.S. of promising non traditional agricultural exports. DR-CAFTA also includes reciprocal commitments on access to service markets, which consolidate domestic reforms that opened most of these markets to private participation in recent years.

Central American countries also agreed to grant reciprocal tariff-free access to their markets to U.S. products. Certain sensitive agricultural crops would be subject to extended transition periods (up to 20 years), in order to allow for gradual adjustment and to respond to domestic sensitivities. Central American countries secured access to flexible safeguard mechanisms to prevent sudden surges in imports or declines in prices.

Commitments embedded in DR-CAFTA would gradually erode current protection levels for various products that have retained high protection in Central American economies, during earlier efforts at easing trade restrictions in the past. The gradual decline expected in prices of basic food staples as a result should prove positive for the vast majority of Central Americans who are net consumers of such goods and whose welfare will be increased by lower prices. This said, not all sensitive products are included, in response to cultural and political factors, and these limitations – together with the agreement's still excessively restrictive rules of origin for the entry of textile products to the U.S. – represent barriers to trade that will continue to foster some inefficiencies in the deployment of domestic resources both in the U.S. and Central America.

On the questions related to domestic reforms, DR-CAFTA commitments promise to lock in a number of the policy and regulatory changes implemented in recent years for the opening of competition in previously protected sectors (e.g., telecoms, financial services, energy) and the modernization of key norms and procedures in areas such as government procurement, intellectual property rights and the treatment of foreign investment, by locking in current levels of access of investors (and bidders) from the U.S.

Costa Rica is the only country that will be required to make significant legislative changes to adapt policies and regulations to its commitments under DR-CAFTA, allowing access to significant portions of its telecom and insurance markets. These reforms had been long postponed and should further foster the modernization, efficiency and competitiveness of these areas of the Costa Rican economy.

Aside from consolidating and spurring further reforms, the treaty should strengthen commitments to upgrade enforcement levels of domestic legislation. This represents a significant challenge in areas like labor, environment and intellectual property rights, which will require decisive efforts and resources to modernize and boost the capacity of public agencies. The net impact of these efforts should be positive, as investment is likely to be attracted to environments with effective institutions. However, while DR-CAFTA will put pressure on the modernization of these institutions, it will not by itself create such modernization. Countries will need strong independent plans of action and sufficient dedication of implementation capacity and resources.

The agreement includes cooperation accords to boost standards and enforcement levels in areas such as labor, environment, customs and other areas. It also offers proposals to develop further cooperation and “trade capacity building”, which should aid in the mobilization of human and financial resources required for key reforms and institutional actions required to implement the agreement and the broader developmental challenges.

Finally, a welcome side effect of the negotiation of DR-CAFTA has been the advancement of regional integration efforts. The decision to make the provisions of the agreement apply multilaterally among Central American countries and the Dominican Republic will deepen regional integration efforts in the region and facilitate the creation of a Central American Customs Union.

4. Economic Effects of DR-CAFTA: More Art than Science

Chapter IV reviews various analyses undertaken to assess the potential impacts of DR-CAFTA on the developing countries of Central America. It begins by highlighting that standard theoretical treatments of the gains from trade indicate that such gains depend on an economy’s capacity to change its productive structure. Otherwise, the gains are limited to the gains on the consumption side, which allow domestic agents to consume a bundle of goods that is larger in economic value than the one without trade reforms. The gains from productive transformation can be substantially higher than the gains from enhanced consumption alone. These conclusions refer to static analyses of the gains from trade.

Regarding empirical analyses of the potential static gains from trade, the evidence reviewed in the chapter highlights two key complementary factors, namely, the infrastructure that affects international transport costs and the regulatory environment. There is strong evidence suggesting that exports to the U.S. market will benefit from the shift from unilateral preferences (CBI) to a free trade agreement, but perhaps more importantly, international transport costs (freight, insurance) have a robust and large effect on the value of exports, regardless of the type of preferential treatment. Also, the evidence reviewed suggest that the gains from trade in terms of increases in GDP per capita is intermediated by the regulatory environment that determines how quickly firms and workers can change their sectors of operation and employment. Thus a complementary agenda to enhance the impact of the DR-CAFTA should consider these factors, even when concerned about the static gains from trade.

Partial equilibrium analyses of the potential sectoral effects of DR-CAFTA suggested that the main short-term winners of the agreement would be concentrated in the apparel industries, abstracting from any impact of the elimination of world quotas in this sector. Nevertheless, these analyses suffer from an inability to capture the potential effects on sectors that are relatively small, since the effects predicted by these models are proportional to the initial level of exports. In addition, they have difficulty dealing with technical issues such as the restrictiveness of rules of origin. Furthermore, such partial-equilibrium models do not consider the effects of the trade reforms in the economy as a whole since they do not consider inter-sector interactions through factor and goods markets.

This chapter also presents the simulation results from a so-called “Computable General Equilibrium” (CGE) model for Nicaragua linked to household data. The simulation relates the macroeconomic results of the model to changes in the returns to unskilled labor to poverty outcomes. Indeed, under a restrictive set of conditions (e.g., segmented labor markets, no dynamic effects, effective transmission of tariff reductions to relative producer prices, and no further unilateral trade reforms) DR-CAFTA could have an overall modest positive effect on Nicaragua’s welfare (income per capita) but with a very small (positive) effect on poverty, and the potential for poor rural households to be negatively affected. Thus, as with the other static analyses, these results further support the contention that DR-CAFTA might not be enough to reduce poverty, although these results need to be interpreted with caution, as they are obviously limited by key theoretical and empirical assumptions.

The rest of the chapter is dedicated to understanding the potential dynamic gains from DR-CAFTA. The first part covers evidence concerning the potential effect of free trade agreements (FTAs) - and trade more generally - on foreign investment, corruption, and innovation. Existing evidence suggests that FDI responds to FTAs indirectly, by enhancing the effect of exports and GDP on FDI. The evidence also indicates that trade might not have a direct effect on corruption, and thus we should not expect large dynamic gains from DR-CAFTA to come from the impact of international trade on the quality of public institutions. The process of democratic consolidation seems much more important, although certain aspects of DR-CAFTA that put pressure on governments to improve the enforcement of their own laws could also be helpful. The existing literature on innovation and economic discovery suggests a mixed picture. On the one hand, innovation efforts might not be related to the incidence of international trade. On the other hand, the probability of observing episodes of “economic discovery” seems to be positively correlated with overall export growth.

This chapter also reviews the econometric challenges and results by investigating the empirical link between FTAs and subsequent economic growth in a large sample of countries. The main result is that the growth rate of GDP per capita is positively associated with a country’s participation in FTAs. This finding is robust to the inclusion of various control variables and econometric methods. Unlike the evidence presented in previous work, the new evidence reviewed does not find that the increase in GDP growth of about 0.6 percent per year was sensitive to the type of partner in the FTA. In contrast, a previous empirical study using a different set of control variables and specifications of the empirical models, did find that access to larger markets has a larger effect on growth than FTAs with smaller partners. In any case, there seems to be substantial evidence that FTAs might help accelerate the pace of

economic development, at least for the first five years subsequent to implementation. In the long-run, the steady-state level of income will be determined by a plethora of other factors and as economies get richer, their pace of growth will tend to decline. Consequently, there does not seem to be a silver bullet, and DR-CAFTA is unlikely to be the solution to all development challenges faced by Central America.

The evidence reviewed should make clear that ex-ante analyses of the potential effects of DR-CAFTA (and trade reforms in general) remain an art rather than a science, since the results are highly sensitive to theoretical assumption and empirical methods. Chapters V, VI and VII of this report provide more guidance regarding the “complementary agenda”, which includes policies that can help DR-CAFTA beneficiaries overcome the challenges posed by the adjustment process as well as the long-term challenge of economic development in the context of DR-CAFTA.

5. Policy Approaches to Managing the Economic Transition: Ensuring that the Poor Can Benefit from DR-CAFTA

While the vast majority of people in Central America are expected to benefit from DR-CAFTA in the medium to long-term, there are at least some people who are at risk of bearing the costs of trade-related economic adjustment in the short-to-medium term. Specifically, although the Central American economies are already relatively open, due to unilateral efforts at lowering barriers to trade undertaken in the 1990s (Chapter II), a handful of sensitive agricultural commodities (e.g., maize, beans, dairy, and poultry) still have significant levels of protection. Chapter V focuses on quantifying the size of the potentially affected population and the magnitude of the potential effects. It additionally examines alternative policy approaches on how to best assist vulnerable groups to ensure that they can benefit from emerging opportunities arising out of the DR-CAFTA.

Given current levels of protection, the introduction of more trade competition for sensitive agricultural commodities under DR-CAFTA can be expected to lead to lower domestic prices for sensitive commodities in each country – in some cases significantly lower prices. For this reason, DR-CAFTA includes a wide range of provisions (described in Chapter III) for dealing with the easing of trade restrictions on sensitive goods, including grace periods for initiating the removal of tariffs, extended phase-out periods for tariffs, interim quotas and/or phase-downs of tariff-rate-quotas, as well as special safeguard measures to protect local farmers from undue harm. Indeed, the Agreement includes extended timetables for reducing protection on sensitive agricultural crops. Phase-out periods are, for some commodities, as long as 20 years and, at least for a few countries, white maize, an important staple crop produced by the poor, was exempted from the commitments to eliminate tariffs. These provisions in themselves represent important protections for producers of sensitive crops, giving them an extended timeframe over which to undertake the necessary economic adjustments.

Given this, what might policymakers expect to be the impacts of removing barriers to trade in sensitive agricultural commodities under the DR-CAFTA? Three new empirical studies using nationally representative household survey data from Nicaragua, Guatemala, and El Salvador help shed light on this and related policy issues. All three studies apply a comparable *net*

consumer-net producer framework to assess likely first-order impacts on household welfare of eliminating quotas and reducing to zero tariffs on several sensitive agricultural products, including maize, beans, milk, poultry meat, bovine meat, apples, pork, wheat, and rice. Despite the phasing out of trade protection negotiated under the DR-CAFTA, these analyses examine expected impacts *as if* all tariffs and quotas were going to be removed completely and immediately under the DR-CAFTA. The approach provides useful insights into the first-order impacts of introducing more competition in the markets for sensitive commodities. It also provides a useful baseline from which to examine policy options – including some important policy trade-offs implicit in the gradual approach to easing trade barriers negotiated under the Agreement.

This analysis on Nicaragua, Guatemala, and El Salvador indicates that the vast majority of households in these countries stand to gain from the price changes associated with removing trade barriers for the "sensitive" agricultural commodities. More specifically, 90 percent of Nicaraguan households, 84 percent of Guatemalan households, and 68 percent of Salvadoran households, respectively, were found to be *net consumers* of the basket of sensitive agricultural commodities, and as such, can be expected to benefit from DR-CAFTA-related price changes. Only about 9 percent of Nicaraguan households, 16 percent of Guatemalan households, and 5 percent of Salvadoran households were found to be *net producers* of the basket of sensitive commodities and, thus, would be expected to experience welfare losses. For El Salvador, a further 27 percent were estimated to remain unaffected due to their essentially negligible gains or losses. Even though potential losers are thus relatively small minorities, nonetheless appropriate attention needs to be paid to ensure that anticipated losses do not harm the poorest and most vulnerable groups, for which targeted programs aimed at those that may suffer significant welfare losses may be justified.

While DR-CAFTA has built into it considerable grace periods and extended phase-out periods for eliminating tariffs and quotas that provide reasonable protection to producers of sensitive crops over a prolonged adjustment period, this approach is not without its own economic and social trade-offs. While phasing of reforms provides producers an extended period to make the necessary economic adjustments, it also deprives consumers for that same extended time period of the benefits associated with lower prices for important agricultural staples. In this context, an alternative (and some might argue more efficient) approach might involve a shorter period of removal of trade barriers for the sensitive commodities, coupled with transfers targeted to those adversely affected by DR-CAFTA in the short-term. In principle, a shorter liberalization period combined with targeted transfers is more efficient economically than phased removal of barriers, as consumers do not have to wait up to 20 years to reap the full benefits of lower prices. Coupling well-targeted transfer programs with quick easing of trade restrictions could thus enhance households' welfare in the short-term on the consumption side while providing producers with a reasonable period of support to make the economic transition.

Regardless of whether the DR-CAFTA countries in Central America choose to pursue this alternative approach, it is important to understand the broad options that policy makers can use to mitigate potential income losses arising from declines in commodity prices if extended phase-outs and safeguards are deemed insufficient: (i) "decoupled" income support payments

to farmers of sensitive crops (e.g., as in Mexico's Procampo program), (ii) technical assistance programs to farmers of sensitive crops, (iii) conditional cash transfers (CCTs) to rural families, effective only as poor families make investments in their children's education, health, and nutrition, and (iv) provision of public goods (e.g., economic infrastructure, basic education, rural financial services, technical assistance) targeted to households and/or regions that are either expected to be particularly affected by DR-CAFTA.

These options can be viewed from two different perspectives. The first is the institutional sophistication required to implement support programs, recognizing that different approaches will tax the implementation capacity of Central American countries to different degrees. This criteria recognizes that effective programs will require, *inter alia*, a viable method of targeting vulnerable populations, a minimum degree of know-how among the civil servants of the implementing public sector agency, the creation of new government organizations (or transformation of old ones) and a minimum degree of independence to ensure the application of technical criteria and avoid political interference. The second dimension is related to whether the program provides incentives (or other support) for broad production diversification, including strengthening the capacity of families to exploit new income opportunities for off-farm and/or non agricultural activities – which may be critical to ensure greater economic mobility among poor households.

The classification is useful to assess the requirements and objectives that may be relevant in each country, as the choice of which type of support program would be more appropriate should be made on the basis of country-specific factors. Decoupled transfers require relatively low institutional sophistication but offer few incentives for farmers to seek new income opportunities, as demonstrated by the Procampo experience in Mexico. Technical assistance programs place a greater burden on the capacities of government agencies, while giving incentives for productive diversification (or upgrading), but only within agriculture. Public goods programs require less institutional sophistication by relying on existing institutions for program delivery, while creating conditions for rural inhabitants to diversify economic activities – although programs of this type may require a strong regional concentration of potentially affected poor households in order to make economic sense. CCTs require relatively sophisticated new institutional capacity (especially in countries where programs of this type are not currently being implemented, such as in Costa Rica, Guatemala and El Salvador), although by strengthening families' human capital, they offer broad support for production diversification.

6. Macroeconomic Policy Implications of DR-CAFTA

Chapter VI reviews evidence related to two macroeconomic policy issues. The first concerns the potential revenue losses that might be produced by DR-CAFTA's removal of import taxes. The other topic is related to the treaty's potential effect on the patterns of business-cycle synchronization (BCS) that could be affected by changes in the structure of international trade.

The fiscal losses that DR-CAFTA is likely to create need to be compensated in all Central American countries to avoid further deterioration of public finances. At present, all Central

American countries with the exception of Guatemala exhibit relatively high debt indicators and require tight fiscal stances to maintain or decrease indebtedness. However, relatively small losses in the first years allow for some flexibility in the timing of the fiscal response in some of the countries -- particularly as some time may be needed for adequate political conditions to emerge.

A more comprehensive fiscal response to DR-CAFTA requires efforts to raise revenues above and beyond fiscal losses, as some of the key measures needed to optimize its effect require increases in public investments (e.g., infrastructure, education, institutional strengthening, and transitional adjustment programs). While some of these expenditures may be temporary and could arguably be financed by greater indebtedness, this may be difficult in practice due to high current debt levels.

The fiscal response to DR-CAFTA should be adapted to the fiscal situation of each country. For the cases of El Salvador and Guatemala, where tax revenue ratios are low (below 13 percent of GDP), the ideal fiscal response would be actions that go significantly beyond recovering direct losses, in order to finance additional social and infrastructure investments that are needed to boost growth and that are made more urgent and productive by the opportunities of DR-CAFTA. In Costa Rica, where the tax ratio is higher but still short of the level needed to guarantee debt sustainability, the ideal response should also involve going beyond compensation for the relatively low projected losses, making improvements in the efficiency and allocation of public expenditures, as well as attracting private financing to fund some of the most significant infrastructural needs. Honduras and Nicaragua, which have benefited recently from the Heavily Indebted Poor Countries Initiative (HIPC), will likely require additional fiscal revenues, improvements in expenditure efficiency and attraction of private financing to respond to the opportunities of DR-CAFTA. In all countries, an essential element of efforts to improve fiscal performance should include the institutional strengthening of tax agencies and their collection capacity, as well as the elimination of exonerations from VAT and income taxes.

DR-CAFTA implementation should also be used to deepen regional coordination efforts in the realm of tax policy. Going forward, a regional coordination agenda should include gradual harmonization of VAT and excise rates, fiscal incentives for foreign investors, information exchange for tax enforcement efforts, double taxation treaties and transference prices.

Regarding the prospects for macroeconomic policy coordination among Central American countries and perhaps with the U.S., business cycle synchronization within Central America is quite low compared to NAFTA and EU, but not when compared to MERCOSUR. In fact, synchronization in Central America is highest between Costa Rica and El Salvador, El Salvador and Guatemala, El Salvador and Nicaragua and Honduras and Nicaragua. Costa Rica and Honduras have a higher degree of co-movement with the U.S. than with any other Central American country. Yet synchronization with the US is still below the levels among NAFTA and even MERCOSUR members.

Furthermore, unlike NAFTA, EU and MERCOSUR, trade in Central America is not predominantly intra-regional. The U.S. is by far Central America's most important trading

partner. With the exception of Costa Rica, there is virtually no evidence of intra-industry trade between Central America and the U.S. The level of intra-industry trade within Central America is comparable to that of MERCOSUR, but below the levels of NAFTA (Canada and the US) and EU (Germany and France). Finally, the degree of business cycle synchronization seems only weakly related to trade intensity and trade structure (intra-industry trade), although the relationship between intra-industry trade and synchronization is slightly stronger, which is consistent with existing international evidence. As such, the gain in synchronization through trade expansion could be modest.

In sum, at present neither Central America's trade structure nor its degree of business cycle synchronization make a compelling case for macro coordination within Central America or between Central America and the U.S. Clearly, trade integration is a dynamic process and as trade intensities and compositions of trade flows change so will business cycle patterns. To fully assess the consequences of closer trade integration for the conduct of macroeconomic policies, information about the future evolution of trade structures in DR-CAFTA are needed. If trade becomes more intra-industry (vertical or horizontal), business cycles are expected to become more similar and independence of macro policy will be less of a concern. However, if trade integration takes the form of higher inter-industry trade then business cycles are likely to diverge from current levels and the ability to conduct independent macro policies will grow more important. In the meantime, other factors that are not directly related to the structure of international trade will remain more important considerations for the design of macroeconomic policies over the business cycle in Central America. One important consideration, for example, is the extent of dollarization of financial assets and liabilities. Hence the macro agenda in the light of DR-CAFTA should remain focused, at least in the short-run, on fiscal consolidation.

7. Obtaining the Payoff from DR-CAFTA: Priorities for the Complementary Agenda

Chapter VII reviews recent evidence in the areas of trade facilitation, institutional and regulatory reforms, and innovation and education, in order to identify key priorities for the complementary agenda for DR-CAFTA. The main challenges identified for Costa Rica include improving road quality, port and customs efficiency, boosting financial depth, and improving the quality and coverage of secondary education. For El Salvador, priorities focus around increasing road quality, reducing shipping costs, and tackling governance challenges, as well as improving the quality and coverage of secondary education. Both countries need to devote more public resources to R&D (with monitoring and evaluation efforts put in place to assess results over time), strengthen public private partnerships for innovation, and enhance the institutional capacity to enforce intellectual property rights laws. In addition to tackling weaknesses in the areas identified for Costa Rica and El Salvador, Guatemala also needs to continue to build on recent accomplishments in improving customs administration, coverage and quality of primary education, and road density, as well as devoting some attention to fostering the development of new export products.

The challenges for Honduras and Nicaragua are likely to encompass a broader set of policy issues, as they face more limitations due to their lower development level. Both countries need to address governance, and work on improving the coverage and quality of primary

education, improving the operational efficiency of ports and increasing the quality of roads and their density. They also need to improve their capacity to absorb knowledge from abroad, strengthen institutions in charge of innovation policy and increase linkages between public R&D programs and the needs of the private sector. Honduras also needs to upgrade customs administration and reduce the costs and time to establish new business ventures.

All Central American countries share a regional economic agenda which needs to focus urgently on achieving a Customs Union, which is critical to reduce transaction costs to trade within the region. In addition, efforts should be deepened to coordinate the development of infrastructure that benefits from a regional perspective, including major road networks, and the development of ports. Mechanisms to formulate a common regional trade policy need to be strengthened, to ensure coherence of future bilateral, regional and global commitments with the new framework provided by DR-CAFTA. In addition, improved coordination of key regulatory policies (e.g., financial supervision, competition, fiscal incentives) may be needed to establish the basis of a deeper and more integrated regional market in the future.

All of the elements of the complementary agenda mentioned here are also components of the broader agenda to boost economic growth in the region. Recent analytical work produced by the World Bank to prioritize actions for broad-based growth in the nations of Central America has highlighted the high return that would be obtained from improvements in the areas of infrastructure, education and governance. DR-CAFTA enhances the social return to these actions and makes them more urgent. Hopefully, this important agreement serves as a useful tool to rally support for consolidating policy reforms of recent years and pushing forward with new energy in the areas in which weaknesses remain, in order to boost the pace of growth and poverty reduction across Central America.