An Enhanced Role of the Economics Element of National Power in Military Operations:

The Mexican Economy as a Case Study for U.S. Northern Command Theater Security Cooperation (TSC) Planning

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Today the western world has shifted focus from a cold-war era emphasis on countering communism, to now competing economically in a globalized market place. The economics element of national power has become critical for supporting military operations that will achieve lasting peace. Too often the understanding of the economics tool is simply understood to mean the financing of various other efforts in an area of operations, and this simplistic economic approach often leads to over-dependence on U.S. monetary aid, vice actually helping a host nation achieve a desired self-sufficiency. A more robust application of economics would seek to develop the host nation’s own financial capacity via appropriate policies and tools of governance to sustain and manage its own trade and financial institutions.

This research paper proposes how a U.S. Northern Command Theater Security Cooperation (TSC) plan focused on economics might be implemented to improve Mexico’s trade and commerce. Five recommendations based on effective solutions developed by various nations facing challenges similar to those of Mexico are proposed in support of a TSC plan. These lines of effort articulate the expected ends, ways, means, risk, and measures of performance to make the plan effective at an operational level. The five lines-of-effort are intricately inter-related in that a change by one will have significant impact on the others. Therefore, one overall measure of effectiveness that will track the combined performance of the five lines of effort will help the overall plan remain focused on the desired end state.

Finally, a new economics doctrine, as a set of concisely stated and authoritatively expressed principles and tenets, with the objective of standardizing economic lessons, should guide the planning and execution of TSC objectives.

Economics element of national power in COCOM  TSC operational planning.  The Mexican economy as case study for a Joint Economics doctrine.

13. SUPPLEMENTARY NOTES  A paper submitted to the Naval War College faculty in partial satisfaction of the requirements of the Joint Military Operations Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy.
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by

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Signature: _____________________

26 October, 2011
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Abstract

Today the western world has shifted its focus from a cold-war era emphasis on countering communism, to now competing economically in a globalized market place. The economics element of national power has become critical for supporting military operations that will achieve lasting peace. Too often the economics tool is simply understood to mean the financing of various other efforts in an area of operations, and this simplistic economic approach often leads to over-dependence on U.S. monetary aid vice actually helping a host nation achieve economic self-sufficiency. A more robust application of economics would seek to develop the host nation’s own financial capacity via appropriate policies and tools of governance to sustain and manage its own trade and financial institutions.

This research paper proposes how a U.S. Northern Command Theater Security Cooperation (TSC) plan focused on economics might be implemented to improve Mexico’s trade and commerce. Five recommendations based on effective solutions developed by various nations facing challenges similar to those of Mexico are proposed in support of a TSC plan. These lines-of-effort articulate the expected ends, ways, means, risks, and measures of performance to make the plan effective at an operational level. The five lines-of-effort are intricately inter-related in that a change by one will have significant impact on the others. Therefore, one overall measure of effectiveness that will track the combined performance of the five lines-of-effort will help the overall plan remain focused on the desired end state. Finally, a new economics doctrine, as a set of concisely stated and authoritatively expressed principles and tenets, with the objective of standardizing economics lessons, should guide the planning and execution of TSC objectives.
Introduction - The Mexican Economy as a Case Study

An effective financial development initiative must look beyond free-trade to grow Mexico’s economy out of poverty.\(^1\) A more robust trade environment would not only improve Mexico’s economy, but would also positively and significantly impact its political character and social welfare. As technology and the information super-highway continue to globalize the world’s trade, international commerce plays an increasingly important role in Mexico’s future. But Mexico’s past trade policies have not paid out their expected return on investment, so the Mexican government must raise its economic competiveness by improving infrastructure, simplifying the tax code, reforming banking policy, diversifying the export markets, and reducing unemployment.

The U.S. Department of State (DoS) articulates in its Merida Initiative (also referred to as Plan Mexico), a goal to “promote economic and social development and good governance in targeted areas.”\(^2\) Likewise, in its Vision 2020, the U.S. Northern Command (USNORTHCOM) articulates the objective to “develop an improved relationship with Mexico… to enhance continental security.”\(^3\) To help reduce poverty and improve social welfare, the U.S. is committed to assisting Mexico enhance its trade policies, strengthen its economic relationships, and encourage more foreign investment.

On a recent visit to Mexico, General Jacoby, Commander for USNORTHCOM, stated that only through a concerted unified effort, and by harnessing all the elements of

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national power, can the U.S. achieve its’ Mexico objectives.\(^4\) Therefore, this analysis proceeds beyond an abstract conception of economics to underscore its’ utility as an instrument of power. Several proposed economic lines-of-effort support a more durable TSC plan to improve Mexico’s economy and security.

**Recognizing Mexico’s Problem - A Wicked Economic Environment**

Some may contend that Mexico’s economic indicators do not support the assumption that its trade policies need major improvement. In fact, when comparing both its exports trade and its Gross Domestic Product (GDP) growth rates (figures 1 & 2), especially as compared to the U.S. - the world’s largest economy - readily leads one to conclude that Mexico is doing rather well as the eleventh largest economy.

![U.S. vs. Mexico Exports (1990-2011)](image)

Figure 1. Exports of Mexico and the United States as % of GDP from 1990 to 2011\(^5\)

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Figure 2. Real GDP Growth Rates of the United States versus Mexico (1990-2011)  

Indeed, the outcome of the trade liberalization measures of President Miguel De la Madrid (1982-1988) and President Carlos Salinas de Gortari (1988-1994) successfully created “fiscal discipline, reduced the public deficit, helped stabilize the economy, paved the way for reducing foreign debt, and contributed to lowering interest rates.”  

The latest 2008 dip in Mexico’s GDP is further evidence that today Mexico is playing on the same level economic field with other major powers. As the world economic engine recovers, Mexico’s neoliberal reforms will once again continue to grow the economy at a healthy level, and will help spread Mexico’s wealth across all of its economic sectors.

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6 Ibid.

Mexico has been experiencing a widening gap between the impoverished and its well-to-do citizens, so that today Mexico has become stratified with its richest 10% earning 39%, while the poorest 20% earn only 4% of its GDP.\(^8\) Forty per cent of the population lives on the equivalent of two dollars per day.\(^9\) Mexico has not created sufficient jobs to support its labor force, nor provided the economic growth to pull its lower classes out of poverty.\(^10\) New middle class formation has been blocked since the 1982 economic downturn, also known as the Tequila crisis.\(^11\) Indeed, when compared to Mexico’s performance during the seven decades prior to Salinas’ “December mistake,” Mexico does not seem capable of sustaining the economic growth necessary to improve its’ economy and pull it out of poverty. Mexico must reverse the current economic downturn, and raise its growth rate to that experienced prior to the 1982 Tequila crisis.\(^12\)

There are as many and varied explanations for Mexico’s shifting economic growth as there are peaks and valleys in its GDP growth figures (figure 3).\(^13\) Among them are the fluctuating oil market, defaults on foreign loans, and periods of rampant inflation reaching as high as 160%.\(^14\)

\(^8\) Ibid.
\(^9\) Ibid.
\(^10\) Ibid.
\(^12\) Ibid.
\(^14\) Ibid.
Instead of examining the many individual GDP peaks and valleys, a more effective attempt to discern informed recommendations is to compare Mexico’s economy by periods starting from its 1910 revolution, and to analyze these distinct periods to more accurately reveal enduring lessons.

Determining a Measurable Objective – The Desired Economic End State

The historical analysis of Mexico’s GDP growth rate reveals that its economy has experienced two distinct periods since its 1910 revolution - the Mexican Miracle and the Lost

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15 Sidney, Weintraub, *Unequal Partners: The United States and Mexico*, Pittsburgh, PA: University of Pittsburgh Press, 2010. p. 4. NOTE: The line delineating the 5.5% GDP rate has been added by this author.
Decades (figure 4).

Figure 4. Holistic Analysis of Mexico’s GDP Growth (% Change, 1954-2007)\textsuperscript{16}

\textbf{The Mexican Miracle, the First Period from 1910 to 1980}

During the first period, referred to as the Mexican Miracle, Mexico’s resources, rather than being used to further its own domestic growth and prosperity, were instead exploited to satisfy the economic needs of the first world developed nations.\textsuperscript{17} To prosper, Mexico first needed to purge itself of foreign economic domination by implementing a new economic theory of import substitution industrialization (ISI) - a strategy of inward and independent economic subsistence and development.\textsuperscript{18} The positive effects of Mexico’s redistribution of wealth from foreign to national control triggered Mexico’s next 70 years of relative prosperity.\textsuperscript{19} However, as technology and the information super-highway increasingly

\textsuperscript{16} Ibid.


\textsuperscript{19} Weintraub, pp. 10-16.
globalized the economy, Mexico could no longer remain isolationist and continue to prosper. Eventually Mexico abandoned its isolationist policy to counter the effects of the dictatorial rule of the Institutional Revolutionary Party (PRI) and to better face the competitive pressures of globalization.

**The Lost Decades, the Second Period from 1980 to 2001**

During this second period, referred to as the Lost Decades, the government replaced ISI with neoliberalism to encourage a free market and broader international trade.20 A major aspect of its reforms included the passing of the North American Free Trade Agreement (NAFTA) and expanding its maquiladora program, which allowed tariff-free imports of materials and components for assembly and re-export to the U.S. Not until 1985 did these sweeping reforms begin to significantly offset the decades of economic decay under PRI mismanagement and its outdated ISI.21 By 2001, neoliberalism finally reached its peak with the maquiladoras now employing over 1.3 million people, and President Fox and his National Action Party (PAN) replacing the 71 year rule of the PRI.22

Since 1982, the post-recession GDP growth has experienced only slight increases per year, from a low of 1.2% to a meager 3.6%.23 In December 1994, as Mexico’s inflation rate accelerated from 6% to 35%, a volatile economy once again exploded into a second Tequila crisis with a negative 5.7% GDP growth. In contrast, the previous period of the Mexican Miracle, during its three decades from 1950 to 1980, averaged a healthy 5.5% annual GDP growth.

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20 Vanden, p. 69.

21 Weintraub, pp. 10-16

22 Nutini, pp. 236-237.

23 Weintraub, p. 99.
growth rate.\textsuperscript{24} Mexico’s $1 trillion economy is not comparable to the $14 trillion U.S. economy. Therefore, to contrast Mexico’s economy to that of the U.S. is not an accurate measure of its economic health. The 3\% GDP growth which sustains the U.S. cannot adequately propel Mexico out of its current poverty. To that end, the World Bank asserts that about a 6\% GDP growth is required to create jobs and encourage adequate economic growth in Mexico.\textsuperscript{25}

For Mexico, the straightforward benefits of neoliberalism and the free-market economy have run their course. Today, Mexico is not maximizing its economic potential, especially relative to that of China, India, and Brazil.\textsuperscript{26} Instead, Mexico has ended the twentieth century with its poverty rate climbing from 44\% to 54\% from 1992 to 2000.\textsuperscript{27} In its effort to achieve sustained economic growth, the Mexican government has announced its National Financial Development Initiative (PRONAFIDE).\textsuperscript{28} But Mexico is once again struggling to improve its logistics infrastructure, to simplify its tax code, to reform its banking policies, to increase its FDI inflows, and to create further job growth.

\textsuperscript{24} Ibid, pp. 15-43.


\textsuperscript{27} Nutini, p. 233.

Designing Economic Lines-of-effort – Practical Examples from a Globalized World

In an effort to generate further economic growth, Mexico broadly outlines its PRONAFIDE goals through five basic strategies: 1) implement structural reforms, 2) increase public revenues and increase public savings 3) promote private savings, 4) promote FDIs as a complement to domestic savings, and 5) strengthen the financial system and transform the development banks.29 To effectively pursue these objectives, Mexico must implement innovative tools to improve trade and economic development. From researching various world economic performance indicators, five recommendations for a USNORTHCOM TSC economics effort, and based on effective solutions developed by various nations facing similar challenges, are proposed:

1. Logistics reform program to help improve infrastructure.
2. Tax code reform to help increase public revenue.
3. Finance reform to promote savings and offer loans to more entrepreneurs.
4. Diversify enterprises to expand exports and attract more FDIs.
5. Expand job opportunities and strengthen Mexico’s financial standing.

Albania’s Logistics Reform

Important parts of Mexico’s infrastructure are either low quality (electricity) or high cost (telecommunications and transport).30 Consequently, prices are higher today in Mexico than in the U.S. The transportation costs of components and market bottlenecks add to the

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cost of Mexican products even if they are made with cheaper labor. The Calderon administration's National Infrastructure Plan (NIP - 2007-12) intends to reverse the decline of the infrastructure that occurred the previous decade, but weak public financing has slowed the implementation of NIP.

Despite Albania’s relatively riskier environment (infrastructure risk of 62 versus Mexico’s 41 – Figure 6), Albania has managed to focus its ambitious investment program to improve its business climate both by undertaking fiscal and legislative reforms, and by improving infrastructure (Figure 5). Over the past three years, Albania’s infrastructure competitiveness has increased while Mexico’s has fallen.

The World Bank Logistics Performance Index (LPI) indicates that countries with better logistics performance can expect 1% additional growth in GDP, as efficient logistics systems support trade diversification and attract FDIs. Countries should invest 5.5% to 7.7% of their GDP in infrastructure. In 2003, the Mexican government spent only 1.2% of its GDP on infrastructure and maintenance. On average, Mexico has invested 3.2% while Albania invested 6.1% from 1996 to 2007. The NIP is striving for a 5% GDP investment.

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31 Nutini, p. 235.
By allocating resources to Mexico’s Social Infrastructure Contributions Trust Fund (FAIS), Mexico will more effectively reverse its decline and should rebuild its under-developed infrastructure to better support more foreign trade and economic growth.\footnote{The World Bank, p. xlvi.}

Georgia’s Open Window Tax Reform

According to the World Bank, it takes fifty-one days to register a new business in Mexico compared to just four in the U.S.\footnote{Richard Jackson, \textit{Building Human Capital in an Aging Mexico}, csis.org. Center for Strategic and International Studies. July 2005, \# http://csis.org/files/media/csis/pubs/csis_2005_building_human_capital_in_an_aging_mexico.pdf (accessed October 15, 2011). pp. 23-24.} Starting a business in Mexico is time consuming and laborious.\footnote{Data Gov, \textit{DataGov Indicators Database, www.iadb.org}. n.d, \# http://www.iadb.org/datagob/index.html (accessed October 19, 2011). Note: Of the 5 country sampled Georgia ranks 1\textsuperscript{st} in requiring 3 days for establishing a new business, as compared to 5 for Albania, 9 for Mexico, 15 for Germany, 19 for Bangladesh, and 22 for Chile.} Moreover, Mexico’ tax code is complex and changes from year to year.\footnote{Peschard, p. 153. NOTE: with the World Bank ranking it 129th out of 133 countries.} Excessive regulations increase costs, discourage new enterprises, and instead encourage the growth of the unregulated informal sector.\footnote{The World Bank. p. xliv.} Improving this business obstacle is a key to improving Mexico’s economic development and boosting its revenues. In particular, the government needs better taxation to reduce its dependence on its volatile oil revenues.\footnote{The Economist Inteligence Unit (EIU) Risk Briefing}

investment and development. Specifically, it aimed to simplify a cumbersome tax code, fight corruption, and set-up effective cooperation with international financial institutions. The new government reduced its more than twenty taxes to only seven. Its revenues significantly increased for the first time since Georgia gained independence from the former Soviet Union in 1991.

Georgia’s significantly improved tax policy risk score of 25 as compared to Mexico’s 41 (Figure 8), substantiates a similar Open Window reform effort to also help Mexico streamline its ineffective tax code. Mexico’s IMPULSO Program involves measures to increase the productivity and dynamism of the self-employed and small scale producers. IMPULSO must be balanced with a tax reform to create more efficiency and equity. Georgia’s successful Open Window Program is an excellent model for Mexico to eliminate obstacles and encourage entrepreneurship.

**Bangladesh & Micro-financing Reform**

The Tequila crises are attributed to a misdirection of investment capital for consumption rather than towards investments. With 37.5% equivalent of its GDP available for domestic credit, Mexico ranks 125th out of 179 nations in terms of private-sector credit,


46 Ostrovsky, p. 2.


and Mexico’s financial risk remains C-rated (Figure 10). Therefore, Mexico must
direct more financing towards economic development.

In the 1970s, Bangladesh suffered from a serious lack of financial investment. Following a 1974 famine, Bangladesh started providing small microfinance loans to poor villagers on the expectation that they would profit economically and be able to repay their loans. Since then Micro-Finance Institutions (MFIs) have become an international success. The primary objective of MFIs is to help the poor become financially independent. They provide credit for self-employment and to finance new income generating activities. An assumption of the MFI model is that when given financing, the poor can then better use their expertise to create more jobs. Wider credit has catapulted Bangladesh to 93rd out of 133 nations in terms of its private-sector finance, with an equivalent of over 59% of its GDP for domestic credit, earning it a B-financial risk rating.

The World Bank recommends a 6% credit increase to accelerate growth by 0.6% per year. Mexico has only 64 MFIs providing 1.9 billion dollars in loans to 4.7 million


54 The Economist Intelligence Unit (EIU) Risk Briefing

investors, compared to 74 MFI s worth 2.3 billion for 20 million investors in Bangladesh.\textsuperscript{56}

By modifying its CONTIGO Program, designed in part to promote employment, encourage local development, supply credit, and provide technical assistance for productive projects, Mexico might easily achieve the World Bank target GDP increases by more closely achieving Bangladesh’s MFI success record.\textsuperscript{57}

\textbf{Chile’s Immunization from the Dutch Disease}

In 2009, Mexico’s oil revenues accounted for nearly 50\% of total government income, while tax revenues, outside the oil sector, accounted for 9\% of the Mexican GDP.\textsuperscript{58}

However, its oil reserves are dwindling. In addition, Mexico is experiencing its slowest rate of productivity growth.\textsuperscript{59} The combination of these two symptoms is what is known as the Dutch Disease - a market failure resulting from the mismanagement of abundant natural resources.\textsuperscript{60} Mexico’s economic crash of 1987 was primarily caused by excessive government debt that resulted from the falling oil market of 1986.\textsuperscript{61}

An effective means to vaccinate against the Dutch Disease is to follow Chile’s example, when in the 1980s, rising interest rates and the falling price of copper exposed its


\textsuperscript{57} The World Bank, p. 16.

\textsuperscript{58} Jaime Ross, \textit{The Future of Oil in Mexico/EL Futuro del Sector Petrolero in Mexico: The Macroeconomic Consequences of Falling Oil Revenues in Mexico: A Country Crisis or a Mixed Blessing?} James A. Baker III Institute for Public Policy, Rice University, 29 April, 2011. P. 10.

\textsuperscript{59} Ibid, p. 11.


\textsuperscript{61} Gould, p. 6.
economy to a weakness in its banking systems and caused a financial crisis. Chile’s copper industry had provided the basis for its growth for more than 150 years. Chile has since diversified to new export sectors, “such as cellulose, fruit, salmon, wines, and methanol.” Now, Chile has reduced its government revenue from copper to a mere 10%. When the price of copper rose in 2003, rather than simply spending its increased revenues, the Chilean government elected instead to pay off its debt and invest in overseas exports, protecting itself from another case of Dutch Disease.

Chile’s exceptional trade risk score of 7 compared to Mexico’s 25 (Figure 15), substantiates the adoption of a similar policy to also diversify Mexico’s export industry to shield it from the volatility of the oil market. Mexico’s PROCAMPO program – intended to help small farmers to switch to more productive crops or occupations should be expanded to diversify Mexico’s export sector and reduce its volatility to the fluctuating oil market; such as Mexico’s already substantial cement industry, or its commercial glass industry.

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64 Ibid.


66 Ibid, pp. 26-27. NOTE: figures 5 & 6 indicate a rise in revenues in 2003, but no fall in Chile’s GDP until the world crash of 2008, and currently Chile seems to have recovered with a GDP growth back above 5%.

Germany’s Mini-Jobs Employment Reform

Mexico’s unemployment rate has steadily risen since the beginning of the century to reach 4.4% in 2011 (Figure 14). Moreover, an accurate figure that reflects Mexico’s large informal work sector is likely to raise this estimate even higher. In 2004 only 17 million out of its 43 million total work-force was part of Mexico’s formal sector; therefore any estimate of unemployment would be one third to one-half of the actual total unemployment rate for Mexico. This drive towards an informal economy is likely due to unwieldy labor-market regulations that encourage workers to avoid taxes, resulting in substantially less revenue for the government.

In 2003, prior to implementing its Mini-Jobs reform, Germany was also experiencing rampant unemployment, and was having difficulty collecting revenues as its workers fled the formal sector to take under-the-table jobs to avoid the high German taxes. The Mini-Jobs reform reversed this negative trend by subsidizing tax contributions for people in low-income jobs and by increasing incentives for part-time and multi-job employment in the low-wage labor market. This program both increased employment and encouraged a return to the formal work sector. One month into its implementation, the German government reported an employment hike of as high as 580,000 new secondary-sector jobs.

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68 Business Monitor International (BMI), Business Monitor International Chart Builder

69 Jackson, figure 5, p 8.


Germany’s exceptional labor market risk score of 29 compared to Mexico’s 61 (Figure 15), strongly suggests implementing a similar effort to help Mexico reduce unemployment. Mexico’s Programa de Empleo Temporal (PET), originally intended to provide employment in marginal rural zones, is low quality and has uncertain impact. By expanding PET with a Mini-Jobs policy, Mexico might also turn-around its unemployment to mimic Germany’s 2003 healthy downward trend.

Measures of Effectiveness (MOEs)

The five recommendations described above provide a brief sample of possible ways to help improve Mexico’s economy. These efforts would complement the various Mexican programs already established. The objectives also match Mexican desired ends as articulated in its PRONIFADE financial development initiative. Their levels of risk may be monitored by referring to Mexico’s Economic Intelligence Unit (EIU) Country Risk scores. Various independent measures of performance (MOPs) are suitable from the vast array of available world economic indicators that support each of the five recommendations. Mexico’s economy is a complex social adaptive system, and as such the five recommended economic lines-of-effort all have inter-dependent effects on the others.

Measuring this complex interaction requires the additional ability to measure the combined effectiveness of the five lines-of-effort. Two economists have worked on just such a GDP growth rate measurement model for Mexico. They empirically modeled various likely economic variables, such as trade indices, capital flows, FDIs, inflation, the price of oil, and others, to denote their statistical reliability as independent variables affecting the

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74 The World Bank. p. 198-135. NOTE: It started strongly with the creation of over a million temporary jobs in 2000. That number was drastically reduced to only 900,000 by 2002.

75 such as the lending rate performance rate, unemployment rate, and the other Business Monitor International (BMI) chart analyses.
GDP growth for Mexico’s economy from 1980 to 2006. The most significant variables were then isolated to provide a statistically relevant equation.

**ECONOMETRICS LINEAR REGRESSION FORMULA:**

\[
y = 0.86y^* - 0.021r + 0.032g + 0.033z - 0.038s ,
\]

where the variables represent -

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<td>(y^*) = U.S. GDP rate</td>
<td>(y) = Mexico’s GDP rate</td>
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<tr>
<td>(r) = credit interest rates</td>
<td>(r)</td>
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<tr>
<td>(g) = public expenditure rates</td>
<td>(g)</td>
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<tr>
<td>(z) = trade protective barriers</td>
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<tr>
<td>(s) = real exchange rates</td>
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- and with any remaining combination of variables all composing the remainder 0.016 proportion of influence on Mexico’s GDP.

This equation may now be interpreted to mean, for example –

- a 1% rise in the U.S. GDP \((y^*)\) would result in a 0.86% rise in Mexico’s GDP \((y)\); and
- a 10% rise in the cost of Mexico’s interest rates \((r)\) would result in a 0.2% fall in Mexico’s GDP \((y)\).

Table 1. Econometrics Linear Regression Formula

Armed with this model whose probabilistic assumptions are validated by real historical data, the Mexican government may now better validate the impact of any new economic policies on Mexico’s GDP once they have been executed.

In fact, Mexico’s Ministry of Social Development (SEDESOL) has articulated its goal to build more accountability through both performance monitoring and objective assessments of policies and programs based on impact evaluations. In order to know which variable must be modified and by how much, all of the MOPs may be evaluated as to their relative effectiveness (Measures of Effectiveness – MOEs) in boosting Mexico’s GDP target.

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77 Ibid.
growth rate to 6%. The various recommendations in relation to the associated, Ends, Ways, Means, Risks, and MOPs, MOEs are summarized in table 2.

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<td>PROFINADE EIU Risk measures</td>
<td>BMI Charts</td>
<td>statistical regression model</td>
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<tr>
<td>1 Improve logistics infrastructure</td>
<td>Albania's logistics reform</td>
<td>FAIS Infrastructure risk</td>
<td>% structural characteristics</td>
<td>government expenditures (g)</td>
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<tr>
<td>2 simplify tax codes</td>
<td>Republic of Georgia's Open Window reform</td>
<td>IMPULSO tax risk</td>
<td>% money growth</td>
<td>real exchange rates (s)</td>
<td></td>
</tr>
<tr>
<td>3 Expand banking policies to encourage entrepreneurship</td>
<td>Bangladesh's micro-financing reform</td>
<td>CONTIGO financial risk</td>
<td>% lending rate</td>
<td>credit interest rates (r)</td>
<td></td>
</tr>
<tr>
<td>4 Attract FDIs through commerce diversification</td>
<td>Chile's immunization from Dutch Disease</td>
<td>PROCAMPO trade risk</td>
<td>exports as % of GDP</td>
<td>trade protection (z)</td>
<td></td>
</tr>
<tr>
<td>5 Strengthen financial sector by expanding job opportunities</td>
<td>Germany's Mini-jobs reform</td>
<td>PET labor risk</td>
<td>% unemployment rate</td>
<td>U.S. GDP (y*)</td>
<td></td>
</tr>
<tr>
<td><strong>Desired End State:</strong></td>
<td></td>
<td></td>
<td>6% annual GDP growth</td>
<td>Mexico GDP (y)</td>
<td></td>
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</table>

Table 2. Summary of Ends, Ways, Means, Risks, MOPs, MOEs
Counter-argument and Rebuttal

The implementation of the Washington Consensus reforms, rooted in the neoliberal economic theories of Milton Friedman, started the privatization of its industries, accelerated its market deregulation, led to the passage of NAFTA, and significantly reduced Mexico’s national deficit. But the creation of new wealth has been anything but balanced and equitable. Instead it has led to a widening economic disparity in Mexican society. The richest 10% receive 39% and the poorest 20% receive only 4% of Mexico’s income.\textsuperscript{79} This disparity is attributed to creating many of Mexico’s social problems, and today it feeds apprehensions about Mexico’s continued ability to maintain lasting peace and order. Many have criticized the Washington Consensus reforms as a solution imposed by the U.S. that led to today’s dangerous socio-economic situation in Mexico.\textsuperscript{80} In a backlash against Washington neoliberalism, a Keynesian economic bias has re-emerged, advocating for a return to Mexico’s heavy regulation of economic policies.\textsuperscript{81} In this vein, the Mexican government has implemented over 200 programs to direct its new socio-economic regulations.\textsuperscript{82} Ultimately, Mexico’s economic stagnation, social disparity, and the “damaged brand name” of the Washington Consensus have all given rise to significant antagonism towards further U.S. economic intervention in Mexico.\textsuperscript{83} The Mexicans would view the

\textsuperscript{79} Nutini, p. xii.

\textsuperscript{80} Peschard, p. 148.


\textsuperscript{82} The World Bank. pp. 127-128.

\textsuperscript{83} Peschard. p. 148.
economic recommendations, particularly coming from USNORTHCOM as more unwarranted U.S. meddling in Mexico’s sovereignty and economic well-being. Critics may justifiably argue that Mexico has sufficient government programs to resolve its own economic difficulties.

No amount of revenue redistribution will make Mexico richer. Rather it must pursue sustained economic growth to reduce its poverty. Mexico must both improve its socio-economic services, and raise its economic performance. Financial programs need to be linked and integrated into productive strategies for growth. Not only is the rate of GDP growth critical for poverty reduction, but a concerted effort to lower poverty must also be part of Mexico’s economic policies if it is to achieve lasting economic stability. “Lowering trade costs through better trade regulations, trade logistics, and infrastructure can make a critical contribution towards [economic] development.” Instead of simply reverting to ISI and protectionism, Mexico must prepare itself to vigorously compete with other free-market economies in a globalized world. Despite the proclaimed ills of the Washington Consensus, Mexico cannot equivocate between neoliberalism and Keynesianism, continue to breed public confusion on the objectives of its reforms, permit the political parties to co-opt its social programs for their own agendas, and allow its government agencies to struggle for solutions to reform for sustained growth. To avoid further policy confusion, Mexico must


87 Peschard. p. 152.
implement practical financial tools that can deliver more utility. Despite significant efforts by the Mexican government (notably SEDESOL) to strengthen their programs and implement appropriate measures for assessing their performance, very few of Mexico’s programs have the required rigorous evaluation criteria that allow for properly measuring their effectiveness.\textsuperscript{88} For example, one of Mexico’s programs - PRONASOL, was discontinued following extensive charges of weak poverty targeting results, and its abuse for political purposes.\textsuperscript{89} For these reasons, more transparency is needed in the management of Mexico’s socio-economic programs.

Mexico’s capacity to integrate successfully into the world economy is a decisive factor for U.S. geo-economic strategy, because the success or failure of Mexico’s economy could also significantly influence in important ways the degree of global integration of other U.S. partners in the way of free trade.\textsuperscript{90} Additionally, their shared borders give the U.S. and Mexico a mutual economic stake in Mexico’s progress. Drug cartels and cross-border migration are only two manifestations of an ineffective Mexican economy. What is more, if Mexico were richer, the U.S. could benefit economically from increasing trade with Mexico.\textsuperscript{91}

The five proposed economic recommendations are targeted toward well-articulated objectives in Mexico’s PROFINADE financial development initiative. They may be integrated into various current Mexican programs, thus giving them a distinctly Mexican

\begin{footnotesize}
\textsuperscript{88} World Bank. pp. 127-128.

\textsuperscript{89} Ibid, p. 133.


\textsuperscript{91} Weintraub, p. xii.
\end{footnotesize}
flavor. Additionally, their histories of being implemented by nations other than the U.S. give
them an international legitimacy that sets them apart from the damaged brand name of the
Washington Consensus. Finally, the five proposals offer a ready solution to the Mexican
government’s imperative to assess the adequate performance of its programs.

Structuring a Solution – A Joint Doctrine for the Economics Instrument of Power

The end of the Cold War has shifted world strategic focus from a predominantly
military conflict to defeat the communist threat, to an economic contest for influencing world
markets. To paraphrase Bernard Shaw, in these state conflicts, everyone still seeks a
military solution. However, by its very nature the contest is now military only in a secondary
and economic in its primary sense. What is more, economic lines-of-effort have often been
limited to a simplistic application, such as the funding and construction of water treatment
plants, roads, and bridges; the delivery of goods and services; or at times, even the outright
handing over of hard cash to a host government. This approach often leads to over-
dependence on U.S. monetary aid, vice actually helping the host nation achieve the desired
self-sufficiency. Moreover, such an unsophisticated treatment of economics fosters third
order self-defeating side effects such as encouraging greed and corruption, undermining a
host nation’s pursuit of economic self-sufficiency, and the unproductive pursuit of the U.S.
funds as an end in itself. A more intelligent application of economics would develop a host
nation’s capacity, via appropriate policies and tools of governance, to focus its government to
sustain and manage its own financial and fiscal institutions.

92 Prevost, p. 231.
93 Bernard B. Fall, *The Theory and Practice of Insurgency and Counterinsurgency*, The United States naval War
College, Joint Military Operations Department,2011(Reprinted form the Naval War College Review, April 1956):45-56. p. 2
The National Security Strategy (NSS) endorses active engagement throughout the world with all the elements of national power, to include economics. The 2010 Quadrennial Defense Review (QDR) lists building the capacity of partners in support of fostering greater human dignity as a key priority. Its goal, to “build the security capacity of partner states,” includes the strengthening of the partner nations’ “capacities for ministerial-level training.” In support of this effort, Joint Publication 3-0 outlines its Shape phase (phase-zero) of a campaign plan as the most appropriate time to conduct TSC efforts. More specifically, these phase-zero Shape activities are intended to enhance international legitimacy, shape perceptions, and influence adversaries’ and allies’ behavior. Therefore, Military commanders must consider how their military plans will contribute to initiatives that are also economic. But to directly apply economic theories is again too vague a guidance to adequately help planners design effective economics tools at the operational level. The five recommendations for helping Mexico at an operational level demonstrate the relevance of bridging economics theories to practical applications vice having to predominantly rely on military tools in planning by a COCOM staff - particularly for planning the phase-zero TSC plans.

For this reason, an economics doctrine as a set of concisely stated beliefs, fundamental principles, organizational tenets, and with the objective of standardizing economics lessons, should be developed to guide the planning and execution of TSC

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objectives.\textsuperscript{97} In this way, doctrine becomes the bridge between the economic theories and their practical application.\textsuperscript{98} This economics doctrine will help reduce costs, improve efficiency, and better synchronize all U.S. TSC operations.

**Sorting through U.S. Interests: Redefining Ends, Ways, and Means**

Even if one thinks of Mexico as a lesser of competing U.S. interests, especially given the demands of the wars in Iraq and Afghanistan, its geographic proximity makes Mexico a major U.S. security concern.\textsuperscript{99} In particular, the interrelation of each nation’s security is demonstrated by the problems of terrorism, illegal immigration, and drug trafficking.\textsuperscript{100} For this reason, the U.S. military must consider scenarios to include countering increasingly dangerous drug cartels, intervening in a “migratory hurricane” caused by Mexico’s deteriorating ability to govern, and more importantly, countering a combination of the illegal immigration with organized crime by terrorists planning to attack the U.S.\textsuperscript{101} Immigration and crime are only symptoms of Mexico’s larger socio-economic issues. Commerce is also part of the same social context. And any financial decisions have considerable socio-economic consequences that must be considered when addressing the migration and drug cartel problems.

Secretary of State Hilary Clinton articulates the increasing importance of economics as an element of national power today. She emphasizes that the “great challenge is not [in]


\textsuperscript{98} Ibid. p. XII-3.


\textsuperscript{100} Prevost, p. 217.

\textsuperscript{101} Ibid, p. 218.
deterring any single military foe, but [in] advancing our global leadership at a time when power is more often measured and exercised in economic terms.” 102 The question is not if, but rather how to adequately address Mexico’s economics conundrum. The weakness of neoliberalism as juxtaposed with globalization needs to be analyzed in designing a new economics strategy for Mexico. Although the Washington Consensus reforms have made critics wary of U.S. policy recommendations, the U.S. cannot afford to be sidelined by anti-American sentiment in Mexico. The philosophy behind TSC missions is a belief that the U.S. cannot be isolationist, and our well-being depends on the stability of partner nations, such as Mexico. A USNORTHCOM TSC plan must include the goal of addressing Mexico’s need to sustain adequate GDP growth.

Mexico’s past trade policies have not paid out their expected return in GDP growth. Consequently, Mexico needs to both improve its economic competitiveness in a global market, and reduce its high poverty. A poverty reduction strategy is inseparable from an economic competitiveness and growth strategy. 103 Thus, it is paramount for the U.S. to help Mexico implement these improved policies. But a simplistic understanding of the Economics element of power often only includes the option to finance other military efforts. Just as other military doctrines elaborate the principles for the proper conduct of military operations, military leaders should develop an economics doctrine to help guide the economics endeavors of all TSC plans. By using management tools such as the five proposals for helping Mexico boost its GDP, the new economics doctrine will help guide all U.S TSC economics efforts.


103 The World Bank. p. 204.
Charts of Comparison between Mexico and the Five Countries Studied

A. Albania versus Mexico

![Albania vs. Mexico Structural % change](image)

Figure 5. Comparison of Structural Characteristic of Mexico versus Albania (2000-2011)

<table>
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<tr>
<th>Mexico Risk Ratings</th>
<th>Current Rating</th>
<th>Current Score</th>
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<tr>
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<tr>
<td>Infrastructure Risk</td>
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Figure 6. Comparison of Infrastructure Risk of Albania versus Mexico

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104 Business Monitor International (BMI), Business Monitor International Chart Builder

105 The Economist Intelligence Unit (EIU) Risk Briefing
B. Georgia versus Mexico

![Graph showing the percentage growth of money in Georgia versus Mexico from 2001 to 2011.]

**Figure 7. Availability of Money of Georgia versus Mexico (% Growth 2001-2011)**

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**Figure 8. Comparison of Tax Policy Risks of Mexico versus Georgia**

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106 Business Monitor International (BMI), *Business Monitor International Chart Builder*

107 The Economist Intelligence Unit (EIU) *Risk Briefing*
C. Bangladesh versus Mexico

![Graph showing per cent lending rates of Mexico versus Bangladesh from 2001 to 2011.](image)

**Figure 9.** Per Cent Lending Rates of Mexico versus Bangladesh from 2001 to 2011

<table>
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</table>

**Figure 10.** Financial Risk Comparison of Mexico versus Bangladesh

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108 Business Monitor International (BMI), *Business Monitor International Chart Builder*

109 The *Economist Intelligence Unit (EIU) Risk Briefing*
D. Chile versus Mexico

Figure 11. % Real GDP Growth of Chile versus Mexico (1990-2011) ¹¹⁰

Figure 12. Comparison of Exports of Chile versus Mexico (1990-2011) ¹¹¹

¹¹⁰ Business Monitor International (BMI), Business Monitor International Chart Builder

¹¹¹ Ibid
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Figure 13. Trade Risk Comparison of Chile versus Mexico

E. Germany versus Mexico

Figure 14. Unemployment Rate as % of Labor Force of Mexico vs. Germany (2000-2011)

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112 The Economist Intelligence Unit (EIU) Risk Briefing

113 Business Monitor International (BMI), Business Monitor International Chart Builder
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Figure 15. Comparison of Labor Market Risk of Mexico vs Germany

114 The Economist Intelligence Unit (EIU) Risk Briefing
List of Terms

December mistake – refers to Mexico’s market crash of 1994, during the term President Carlos Salinas de Gortari’s presidency.

Import substitution industrialization (ISI) – A popular economic policy for Latin America in the 1950s, espousing a closed economy (high tariff barriers, quotas and exchange controls) and a strong role for the state in regulating commerce.

the Lost Decades – The period starting from 1982 in Mexico’s inadequate economic performance.

Maquiladora – a Mexican enterprise entitled to special customs treatment, allowing duty free temporary import of machinery, equipment, parts and materials, and administrative equipment.

Merida Initiative - The U.S. Department of State’s plan for partnering with government of Mexico to confront activities that threaten the security of the United States.

Mexican Miracle – Mexico’s economic and social development from right after its 1910 revolution until the market crash of 1982.

Mini-Jobs reform – Germany unemployment program which subsidies of social security contributions to people with low-earnings jobs

NAFTA - North American Free Trade Agreement, to reduce trade tariffs and expand trade between Mexico and the U.S.

National Financial Development Initiative (PRONAFIDE) - Mexico’s program to manage the efforts to achieve sustained economic growth and reach a GDP growth rate higher than 5%.

National Infrastructure Plan (NIP) – Mexico’s Program to increase the coverage, quality, and competitiveness of Mexico’s infrastructure.

Neoliberalism – an economic theory that encourages free trade, privatization by minimizing government intervention in business.

Open Window program – Republic of Georgia’s program to streamline its tax code and encourage more businesses.

Plan Mexico – based on a similar Plan Colombia which preceded it, a colloquial term for the Merida Initiative.

Tequila crisis – a sudden economic downturn attributed to a misdirection of investment capital for consumption rather than towards investments.
**Vision 2020** - provides strategic guidance and direction for USNORTHCOM as it moves toward the year 2020.

**Washington Consensus** – In 1989, several Washington-based institutions delineated 10 economic recommendations for helping the Latin American economies to implement the economic theories of “neoliberalism.”
BIBLIOGRAPHY


Poverty Environment.net. *Copper-driven Prosperity in Chile.* n.d.


Ruehle, Alex, and Kishole G. Kulkarni. *Dutch Disease and the Chilean Cooper Boom.* n.d.


Terraza, Aaron, Demetrios G. Ppademetriou, and Marc R. Rosenblum. *Evolving Demographics & Human Capital Trends in Mexico and Central America and Their*


