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Presentation

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In Number 1st presented an article *The National Statistical System of Paraguay, legal framework, scope and role coordinate system* by CANUL-ALCOER, Yesenia with adscription in the Universidad de Quintana Roo, in the next Section an article *Over-indebtedness and economic growth: A case study of Portugal, Ireland, Greece and Spain* by VARGAS, Oscar, RAMOS-ESCAMILLA, María, OLIVES, Carlos and GARCIA, Lupe with adscription in the *National Chengchi University,Universidad Tecnológica del Suroeste de Guanajuato,* State University of Santa Elena, respectively, in the next Section an article *Job placement of persons with disabilities in Paraguay: An Economic, social and business vision* by MOLINAS-BENITEZ, Víctor with adscription in the Universidad privada del Este, in the next Section an article *Funding decisions on SMEs in Paraguay. Analysis from economic theory* by PORTELLI-BRITEZ, Miriam with adscription in the Universidad de Quintana Roo-México, in the next Section an article *Economic growth and external constraints: Evidence of Thirlwall's Law for Paraguay 1994-2012* by TUN-GONZALES, Adrián, in the next Section an article *Public policy and its relationship with local economic development* by CENTENO-ROA, Ramona with adscription in the Universidad de Quintana Roo. in the next Section an article *Global value chains, learning, innovation and policies. CGV case of aviation in the state of San Luis Potosi* by *VALDIVIA-ALTAMIRANO, William*, with adscription in the Universidad Autónoma de San Luis Potosí.

Content

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Article

The National Statistical System of Paraguay, legal framework, scope and role coordinate system

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Abstract

The Statistical System of Paraguay is one of many international organizations, which are responsible for coordinating, developing and coordinating projects collection of statistical information. Such a system, is subject to the Code of Practice Statistics Statistical Conference of Latin America and the Caribbean, which shows a series of 17 principles which govern both the national and international legal framework, of which the Statistical System of Paraguay suffers at certain points and which have not been entirely successful its development and free and clear of statistical products accessibility.

System, statistical, legal framework

Citation: CANUL-ALCOCER, Yesenia. The National Statistical System of Paraguay, legal framework, scope and role coordinate system. ECORFAN Journal-Republic of Paraguay 2015, 1-1: 1-10

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Introduction

The need for reliable statistics and generate profit societies for the formulation of development plans, sectorial programs, public policy and governmental centers of attention primary focus is not only in the national but in the international arena. The aim to unify and standardize both the procedures, methodologies and statistical products to form in this way a unified statistical framework, which has been implemented from various international organizations such as the Bank of Mexico, the United Nations and the Statistical Conference Latin America and the Caribbean Economic Commission for Latin America.

Therefore, the following work emerged as the concern to introduce the legal framework and organizational coordination of the statistical system of Paraguay and thus to define their areas of action, the organization that is established by the Department of Statistics, Survey and Censuses of Paraguay, as coordinating body. The mechanisms implemented nationwide in coordination with other international bodies charged with monitoring and systematize national statistical systems of the countries.

In the first part of this work, some international bodies of which are Paraguay governed for the implementation of methodologies and statistical outputs are detailed. In the second paragraph, the legal framework on which was built the General Directorate of Statistics and on which the National Statistics System was formulated Paraguay presented.

As part of the final sections, the work that is currently doing the Directorate General and the link made with other offices, secretaries and ministries of the Republic to realize the tasks that were raised in the National Statistical Plan they are presented. And in the final part of this work, the code of good statistical practices on which the work the National Statistical System and some relevant considerations made by the author, to improve these tasks are performed is regulated is presented.

International Panorama of Statistical Information Systems

Every nation has the need for relevant statistics to make their own knowledge of both institutions, agencies, academics and the general public, the capabilities found or social, economic and political flaws which need to be addressed.

The detection, analysis and development of public policies to address the many issues and emerging countries, are based on diagnoses obtained mainly from the development of relevant statistics picture of them. Many have been international agencies have supported and endorsed statistical methodologies for the development of such worldwide and thus have a unified reporting on poverty, economic development, economic equality framework, social welfare, empowerment groups marginalized, among other items. United Nations since 1947, creates the Statistical Commission of the United Nations which serves as dome entity of the global statistical system. It brings together the heads of statistics of the member states of the United Nations. As part of its main objectives is the creation of statistical standards, the development of methods and methodological approaches for census-taking, surveys, among other information collection instruments (UN, 2013).

In 2013, the Statistical Commission of the United Nations has to reform its fundamental principles of compiling official statistics, which are agreed to be complied with by member countries within the framework of the International Day of Statistics, whose initial formulation It was made in 1994 but in 2013 passed to the Social Economic Council. In March 2014, the fundamental principles of official statistics are reformulated, again at the hands of the Statistical Commission, which currently yield force in member countries and agreements established with other international organizations (UN, 2014).

Fundamental Principles of Official Statistics of the United Nations highlighted the characteristics that must meet the statistics produced by each of the nations. The bottom of these is in its objective, which calls on nations to develop official statistics as an essential part of an official information system, to form a democratic society. "To this end, the official statistical agencies have compiled and made available on an impartial basis by official statistical test of practical utility for citizens to exercise their right to information (United Nations, 2014: 2).

The other principles dealing mainly coherent and coordinated approaches in the correct interpretation of the data, the bodies responsible for carrying out the methodologies and statistical tools previously agreed upon by the agencies of each nation.

Other agencies whose objective seeks to present information statistics from its member countries, is the World Bank. Like the United Nations, within the main objective of presenting statistical information timely, truly and statistics based on internationally agreed methodologies, it is compiling relevant statistics and necessary for public policies and cooperation programs to combat poverty, marginalization and social backwardness of the country.

The Economic Commission for Latin America (ECLAC) from 2001 creates a subsidiary body that specializes in coordinating member countries to carry out work on the statistical measurement topics. Statistics of the Americas (CEA) Conference is the name given to this body, whose last meeting was held in 2013. As part of its updated objectives, strengthening the organization and management practices of national offices are statistics, including the integration and coordination of national statistical systems of the countries participating in this conference (ECLAC, 2015).

As part of the recent activities of the Statistical Conference of the Americas and the Caribbean, in November this year was held the Forum on Strengthening Management Practices of Statistics in Latin America and the Caribbean. This forum arose from the agreement established in 2011 between Statistics Canada and the Ministry of Foreign Affairs, Trade and Development Canada in order to exchange knowledge and best practices with colleagues from national statistical offices in Africa, Latin America and the Caribbean .

The coordination between the two institutions, is called International Management Program statistical agencies (International Statistical Fellowship Program, ISFP), whose work has been translated into the realization of 11 seminars, in which participated 100 delegates from 46 countries and 6 regional statistical offices.

Thus, the Forum on Strengthening Management Practices Statistical again emerges as a meeting between ISFP participants in such a way that sought to provide the heads and senior managers of national statistical offices, strategies and management tools to improve their leadership skills in their respective national statistical systems in a changing environment (Statistics Canada, 2015).

Presentation of the National Statistical System of Paraguay

Statistical Paraguay system of initiatives and agreements obtained from the bodies mentioned above. As part of the Forum on Strengthening Management Practices of Statistics in Latin America and the Caribbean and the Statistical Conference of the Americas and the Caribbean, the State of Paraguay has updated both Censuses and Surveys interest in different fields of According to the different groups that worked in cooperation with other countries. In which the working groups Harmonization Poverty Statistics, Census of Population, Agricultural Statistics, Statistics on Children and Adolescents, Institutional Strengthening, Labor Market Indicators figure.

Although the groups within which collaborates the country as part of the Statistical Conference and the Forum for Strengthening Management Practices Statistics are multidisciplinary there others that have failed to participate due to lack of coordination internally to obtain data on international classifications, national accounts, environmental statistics, gender statistics, public safety and justice, the measurement of information technology and communications and tracking statistics of the Millennium Development Goals and Agenda for Sustainable Development (ECLAC, 2015).

In Paraguay, the statistics and coordination between agencies to carry out the compilation thereof, it is in charge of the Directorate General of Statistics, Surveys and Censuses (DGEEC). Besides being responsible for the dissemination of the national statistical system also it performs the same functions for the National Cartographic System. DGEEC has the technical direction of all statistical work produced by the institutions and secretaries of the Paraguayan State.

The legal framework on which are set forth the functions and areas of action of this dependence, are set out in Decree Law 11,126 of 1942 reorganizing and coordinates the statistical services of the Republic of Paraguay. In such a legal status, it was established as a direct task of the Directorate General of Statistics, Surveys and Censuses, compiling statistics carried out by public or private agencies, and coordinate it on the methodology of capture, collection and application of statistical tools the development primarily of the following statistical resources:

- Population and Housing Census

- Economic Census

- Generation of continuous employment statistics

- Household Budget Surveys in or Family

- Vital Statistics

- Tourism Statistics

- Cooperative National Census

- Census Aging

- National Census of Indigenous Peoples

- Survey of Income and Expenses

The form of coordination of the National System of Paraguay, is simultaneously between institutions and ministries in each department of the Paraguayan State. It is the responsibility of the Directorate, the commission in each public and private officials or representatives to perform or organize the statistical work to be determined by dependencies. These tasks are specified in Articles 6 and 7 of Decree Law 11,126:

"The ministries and heads of the relevant distribution will have to adhere to and implement its dependencies all diligence observations, instructions and orders of the Directorate General of Statistics and render the necessary support and cooperation ...

In data collection and statistical research, all departments and public and municipal offices and the political and ecclesiastical authorities, judicial, police of the Republic, shall be construed directly with the Department of Statistics, without intervention or permission of their superiors. (Law 11,126, 1942: 3) "

Although the main functions of the Directorate mentioned above, the Department of Statistics also performs continuous publication of the Statistical Yearbook of the Nation with a selection of all the information collected, the organization of the above detailed statistical resources, organization a library and a statistical central file and attention of requests for information from national authorities.

In 1989, Decree Law is not enacted. 49 where the Department of Statistics which until then under the Ministry of Finance, passed to depend on the Ministry of Planning Economic and Social Development which later is accompanied by the Law of Financial Administration, the so-called Law 1535 1999 and Decree no. 11,918 2008 which it reorganizes and organizational and functional structure of the Directorate General of Statistics, Surveys and Censuses is established which it is renovated in 2014, from the new Decree Law 2707, by which the organizational structure of the Directorate General of Statistics, Surveys and Censuses is approved and is authorized to establish the internal organization, attributed the corresponding functions and approve manuals of procedures and functions.

The legislation is reformed again in 2015, by Decree Law 3087 by which reorganizes, functions, objectives and scope of competence of the Directorate is established. Likewise, it is empowered to address organizational and functional autonomy in the legal and regulatory framework that was broken in earlier lines. As part of the formulation of new objectives, he regards the detailed objectives that institution in the previous decrees adding the development and implementation of a National Statistical Plan that every year should be consistent with the strategies of economic and social development of the country.

ISSN-On line: 2414-4827
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CANUL-ALCOCER, Yesenia. The National Statistical System of Paraguay, legal framework, scope and role coordinate system. ECORFAN Journal-Republic of Paraguay

In addition the Department also is responsible for the promotion to the people, to arouse and encourage the same statistical activities to promote their activity and ongoing collaboration. Promote training of human resources for the benefit of research and statistical activities; it is just one of the objectives to be added to the list of new targets (Decree Law, 3087; 2015).

System Coordinator role

Currently censuses and surveys that have succeeded in implementing or are being carried out are:

- Population and Housing Census

- Income and Expenditure Survey

- Continuous Employment Survey

- Beneficiaries Census CCT program, where the Secretariat for Social Action (SAS) is responsible for implementing it.

- Updating and improving the methodology for measuring poverty, by an interagency committee with World Bank support.

- Economic Survey Monthly, by the Central Bank.

- Monitoring Survey Program to Combat Poverty, organized and implemented by the Central Office.

- Victimization Survey, by the Interior Ministry.

- Statistics on trafficking in persons, in charge of the Secretariat for Women.

- Census of the Prison Correctional Directional under the Ministry of Justice and Labor.

- Statistics and environmental indicators of the Ministry of Environment.

- PARINFO Indicators System has begun to give follow-up to the Millennium Development Goals and plans.

- TB Prevalence Survey of the Ministry of Health.

- Test Pilot survey of literacy levels by the Ministry of Education.

- Survey of water and sanitation United Nations system.

- Census policemen who carried out the Interior Ministry.

All these surveys and censuses, were governed under the 2009-2013 strategic plan aimed at the country at the end of 2013 reached a statistical level, both coverage and quality, ensuring the robustness and reliability of the information supporting the formulation , implementation and evaluation of public policies for development. The strategic plan proposed four areas, covering the establishment of the National Statistical System, the Integrated Household Survey System, basic economic statistics and the Census of Population and Housing (DGEEC, 2015).

However, as previously it detailed the Directorate General is responsible for coordinating the work performed by departments or ministries of the government order, mainly in developing surveys and censuses focused on sectors of the population.

As shown in the table below, the institutions that execute, interpret and analyze the results of certain statistical tools are:

Unit / Institution / Ministry	Resource Name or statistical Instrument
Ministry of Justice and Labor	Observatory first job, employer's statistics, vital statistics, rankings of business activities.
Ministry of Industry and Trade	Statistics on micro
Ministry of Health	Health information system, screenings of children under 5 years.
Ministry of Foreign Affairs	Statistics of Paraguayans abroad and foreigners in Paraguay
Ministry of Public Works and Communications	Information system on public works
Ministry of Agriculture and Livestock	National Register of National Agriculture
Secretary of Environment	Environmental Statistical System and Water Resources
Secretariat for Women	Statistics of violence and use of time
National Indigenous Institute	Databases on land supplied to indigenous peoples
Ministry of Public Administration	Database of public officials
Ministry of Returnees	Database nationals repatriated
National Secretary of Culture	Statistics on cultural consumption
National Housing Council	Housing deficit calculation methodology for the identification and characterization of socioeconomic settlements.
General Post	Market study

Table 1 Work coordinated between agencies and institutions and DGEEC (2015).

Deficiencies and shortcomings in the system

Aware of the need to improve production quality and confidence in the national statistical offices within the framework of national statistical systems, it advances in the process of comparability of regional statistics. For its part, the Republic of Paraguay has not been left behind, when evaluating the National Statistics System. This assessment follows the Code of Good Practice in Statistics in Latin America and the Caribbean, conducted by the working group focused on institution building, in which the countries of Mexico, Panama and Paraguay under the coordination of Colombia participate.

The code of practice is a technical instrument containing practical rules for the independence of national statistical offices and coordination of statistical production at the national level.

A guide to improving the quality of the statistics produced in the region and aims to coordinate the statistical activity, improve the quality of official statistics and strengthen user confidence, promoting the application of best methods and practices for production and dissemination (ECLAC, 2011).

The plant code 17 principles which evaluates characteristics of legitimacy, reliability, statistical independence, among other features that the Statistical Conference of Latin America and the Caribbean, rethinking from the publication of the Code of Good Practice of Statistical Information Systems in Europe (Eurostat).

Sections	Principles	Characteristics
Institutional environment and coordination	1.- Institutional Independence	The National Statistical Office and members of the national statistical system should have professional independence from political, administrative agencies and other external interference in order to ensure the credibility of official statistics.
	2. Coordination of the national statistical system	Coordinating entities producing statistics within the national statistical system allows planning and implementing national statistical activity in a participatory manner, maintaining close contact and working together is essential to improve the quality, comparability and consistency of official statistics.
	3. Mandate statistical data collection	The national statistical activity must have a clear legal mandate to collect information for the production of official statistics. At the request of the national statistical offices and members of the national statistical system, it shall be required by law to administrations, businesses, households and the general public to allow access to data for the compilation of statistics official or deliver data, respecting statistical confidentiality.
	4. Statistical Confidentiality	The national statistical office and other members of the national statistical system must guarantee the protection and confidentiality of information with which official statistics are produced, so as to avoid identification of the sources.
	5. Adequate Resources	The resources available to national statistical activity must be sufficient and suitable for producing official statistics.

	6. Commitment to Quality	Entities producing statistics within the national statistical system should work and cooperate according to norms, principles and standards.
	7. Impartiality and objectivity	The national statistical office and other members of the national statistical system must produce and disseminate official statistics respecting scientific independence and in an objective, professional and transparent manner, so that all users are treated equitably.
	8. International cooperation and participation	The entities belonging to the national statistical system should cooperate in the exchange of experiences and information and to participate in the joint development of statistical standards and international activities.
Statistical production	9. solid Methodology	The production of official statistics from the National Statistical Office and the other members of the national statistical system should be based on instruments, processes and solid knowledge.
	10. Appropriate statistical processes	The national statistical office and other members of the national statistical system should be used at all stages of the statistical process proper procedures and tools to ensure the quality of official statistics.
	11. Request not excessive information	The national statistical office and other members of the national statistical system should set their goals to progressively reduce the burden on respondents. The request for information must be consistent with the needs of users and not excessive for supplies.
	12. The relationship between cost and effectiveness	The national statistical office and other members of the national statistical system should use resources efficiently, effectively and efficiently.
Statistical production	13. Relevance	The national statistical office and other members of the national statistical system must meet the information needs of users according to their requirements.

	14. Accuracy and reliability	Official statistics produced by the national statistical office and other members of the national statistical system should reflect reality accurately and reliably.
	15. Timeliness and punctuality	The national statistical office and other members of the national statistical system must produce and disseminate official statistics in a timely, timely and transparent manner.
	16. Coherence and comparability	Official statistics produced by the national statistical office and other members of the national statistical system should maintain consistency internally and over time and comparable between regions and countries.
	17. Accessibility and clarity	Official statistics generated by the national statistical office and other members of the national statistical system should be presented clearly and understandably and appropriately disseminated, allowing equal access to all users

Table 2 Principles of the Code of Practice of the national statistical systems in Latin America and the Caribbean (2011).

The National Statistical Information System of Paraguay suffers in certain principles of the code of good practice. As part of the principle of coordination of the national statistical system, the Directorate General of Statistics, Surveys and Censuses makes a marathon to coordinate each of the secretaries and ministries of the Republic to carry out activity keeping practices and implementation of surveys and census as the implementation of relevant methodology and interpretation of results. However, DGEEC could reduce such coordinating role as parent institution if the statistical information, was responsible for compiling the statistics by sector. Thus, it would ensure that the institutions that currently keep statistics cease to be judge and jury in the SPC.

Concerning the principle of adequate resources, has continuously resorted to DGEEC credits to the Inter-American Development Bank or the International Monetary Fund to finance the implementation of the Population and Housing Census, as happened in 2012. This could generate dependence towards these institutions and begin the loss of autonomy of the institution as the national statistical system.

Although the Republic of Paraguay through its national statistical system and the coordinator of the same unit, the DGEEC has made numerous collaborations with Latica American countries and the Caribbean, and countries like Canada that have allowed him to train and renew methodologies for statistical work. Paraguay's statistical system has lacks important partnerships to carry out the assignment of international classifications in the international geo statistical framework have launched the United Nations and its counterpart on the continent, the Statistical Conference of Latin America and the Caribbean.

And as a major part of the statistical system which suffers from Paraguay, it is on the principles of relevance, accessibility and clarity. DGEEC could not establish a direct link with society and users of statistical data, unable to coordinate processes between them, to advise, train and inform users about the statistical products, and to consult regularly on the practical usefulness of the statistics. Similarly, the 'no users have expressed through surveys of satisfaction, acceptance and usefulness of statistical products offered under the National Statistical System of the country.

Regarding access to statistical resources clearly there just a problem in the process of access to information sources, due to the many leagues to receive in the mail people database requested on many occasions, even they could not reach. In addition, the presentation of results commonly have free access as easy to obtain through reading formats, with reports prepared by the same Directorate General of Statistics, Surveys and Censuses. This prevents both users and researchers, the breakdown and other treatments databases, given that they are presented in text format. It is necessary, the presentation of databases using freely available digital formats and platforms specialized presentations in handling statistical data (Excel, SPSS, Access, Stata, etc.).

Conclusions

The National Statistical System of Paraguay, through multiple international collaborative work tables and regionally, has managed to coordinate and establish a framework for reliable, accurate and useful statistics for use by secretaries and ministries of the Republic to serving sectors of the population and require prompt action by formulating relevant policies.

Thanks to the consolidation of Paraguayan statistical system, it has achieved a breakthrough in the implementation of statistical methodologies, professionalization of the managers of the statistical information and collaboration among institutions responsible for carrying out practices collection of statistical information.

Moreover, the critical points of the Paraguayan statistical system are in the last stage of the statistical process in accessibility and clear presentation of results and data obtained from surveys, censuses and other statistical products. Failure to file across platforms or planned statistical easily accessible and their management, has made it impossible to reuse these research projects, either to disaggregate data and get only those that are useful to the researcher.

Although Paraguay's statistical system has generated great advances in the legal, judicial, administrative and coordination with the executing institutions field of statistics tasks. There is still a large gap between legislation that states the autonomy of the Directorate General of Statistics, Surveys and Censuses of Paraguay as compiler and coordinating body of statistical plans and real autonomy, both administrative for his role as organizer and executor not dependence on international financial institutions to develop projects such as censuses and surveys.

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Over-indebtedness and economic growth: A case study of Portugal, Ireland, Greece and Spain

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Abstract

The paper exposes the relationship between debt and growth. The first part theoretically analyses the debt overhang problem and its mechanism through which debt affects growth: macroeconomic stability, political stability, investment, interest rate, capital flight, inflation, and poverty. We conduct a brief review of these variables in the 4 European countries to identify this phenomenon. The second part we analyze external debt and economic growth by conducting an empirical quantitative analysis, a linear panel data model, using quarterly data from Ireland, Greece and Spain of the period 1990 to 2012. We expect to find a negative relationship between the growth and debt, consistent with the debt overhang theory, and identify what accounted loss of growth can be attributed to their high levels of external debt.

External debt, economic growth, debt overhang

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Introduction

The current high debt levels and its persistent increase combined with a low economic growth in the developed economies have revived the historical debate over the effects of government external debts on the economy. Spain high debt levels not only have simultaneously appeared long with low economic growth and in some period's economic declines and the setting off of social economic problems such as higher unemployment and poverty rates.

The Kingdom of Spain is a developed country, located on the Iberian peninsula in southwestern Europe, with a 7,4796.25 Gross Domestic Product (GDP) per capita in the third quarter of 2013, using purchase parity purchase (PPP, nominal U$). This value is 0.71% less than the GDP per capita PPP of year 2007. During the same period the debt[1] to GDP ratio increased by 155% and in the third quarter of 2013 had an obligation of payment equivalent to 92.67% of its GDP.

The investigation conducts an applied research to determine if the high debt levels are contributing to its negative growth tendency and identify if the theoretical mechanisms in the literature through which the external debt is constraining growth are empirically correlated. The study uses an econometric time series analysis for the case of Spain for the period 1980 (2nd quarter) to 2013 (3rd quarter). In order to confirm this I explore qualitatively and quantitatively the effect of external debt on growth and its mechanisms in the light the debt overhang theory. This paper aims to not only confirm the validity of the existence of a debt overhang situation in Spain but also identify the mechanisms though which external debt affects growth in the case of Spain.

I expect to identify economic distortions created by Spain's relative high levels of external debt and provide some policy suggestions based upon the study.

The organization of this study is the following: Section 2 reviews the theoretical and empirical literature that binds economic growth and external debt. Section 3 conducts the case study of Spain. It addresses this issue two ways. First, an overview of the record of the economic situation and the empirical record of the mechanisms theoretically exposed through which debt affects growth. Second, it presents the time series regression of Spain using quarterly date for the period 1980 to 2013. Section 5 discussion and findings, Section 6 concludes and section 7 we will present the policy implications of our findings.

Literature Review

The foundation of the external debt thinking is problematic to state, but it was addressed by the classical economist like Adam Smith (Smith 1981), David Ricardo (Ricardo 1821/1951) and J. S. Mill (Mill 1965), they constructed the first attempts to construct a conceptual theory and policy implications of the phenomena. At this time the theoretical framework used to study the negative effects of external debt and growth is mainly under the debt overhang theory (Krugman 1988). Before addressing our primary matter I expose briefly some key theoretical constructions dealing with this issue.

An over simplified summary of Adam Smith's and David Ricardo's concerns was that public debt distorted the incentives to invest they believed that its emission represented a future tax increases.

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[1] According to the Maastricht definition of external debt.

This did not only represent a sum cero situation but also generated a crowding effect of productive investment, since private savings moved away from productive investments to nonproductive purposes (Nicholson 1920). J. S. Mill's writings reaffirmed earlier authors but also exposed its influence in the rise of domestic interest rates and inflation (Tsoulfidis 2013, 3-5).Modigliani conducted an empirical analysis of debt using basic economic identities, his result was that it reduced the flow of government revenues and lowered private stocks of capital. He based his argument in the crowding-out effect mentioned by previous authors, and identified a rise of long term interest rates to both government bonds and private lending (Modigliani, 1961).

Meanwhile Diamond using the neoclassical growth model uncovered that reduces in the utility of individuals in the long run due to four reasons: i) the issuance of debt generates future tax increases to finance the new debt, this means that this is a ii) change in the wage balance to interest ratio caused by the impact of taxes on the supply, causing iii) a fall of demand of capital given the level of wages and iv) a drop of the utility factor (Diamond 1965, 1137-1141).

Former issues became relevant in the study of economics and development since the debt crisis in the 1980's affected many developing countries. One of the reasons for this was the economic decline generated and the drops of standard of living of people. This situation provided new empirical and theoretical development; which crystalized in the formulation of the debt overhang hypothesis. A debt overhang situation is defined by as "the presence of an existing inherited debt sufficiently large that creditors do not expect with confidence to be fully repaid" (Krugman 1988, 1-2).

This work speaks of an existing negative relationship between growth and high debt, because from a certain threshold debt begins to generate distortions in the economy. He argues that not all the income that the government receives can be used to pay debt and a portion available for it. This creates uncertainty among investors due to fears of cessations by the government of its financial obligations (default) and its political considerations.

Krugman's early theory has been further developed, now some authors have provided systematic ideas of the transmission mechanisms of the effects of external debt on growth. According to the existing literature there are 6 mechanisms through which debt can affect economic growth, the casual mechanisms are the following: i) macroeconomic instability ii) political instability; iii) investment; iv) interest rate; v) capital flight; vi) inflation and; vii) poverty. We willexplain the casual mechanism of these variables with debt overhang. An overview of them is followed:

Macroeconomic Instability

Macroeconomic instability is an elusive concept, (WB 2005, 93) defines it as the "phenomena that make domestic macroeconomic environment less predictable". Scholars distinguish the effect of external debt and growth along two dimensions. The first dimension concerns the direct effects on some key economic variables, while the second dimension is the indirect effect on the government ability to react to economic shocks (internal or external).
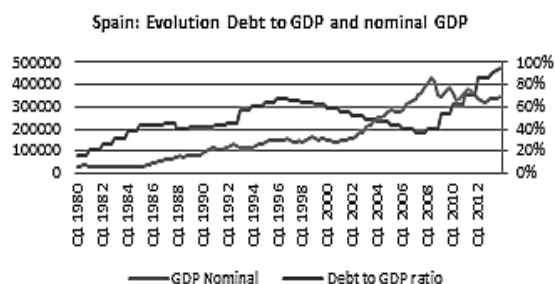
Graphic 1 Growth Domestic Product: 1980s to 2013
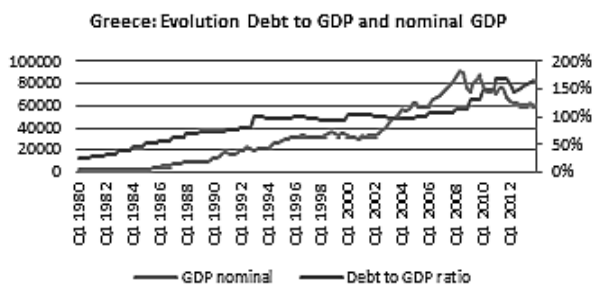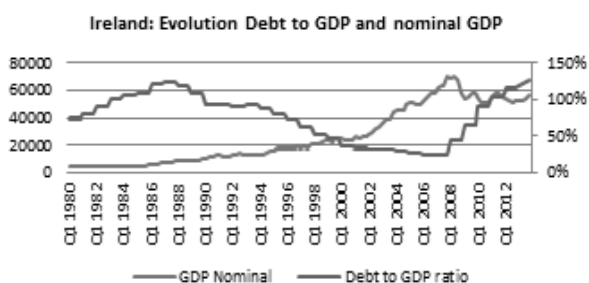
Graphic 2 Evolution Debts

The first issue has been addressed by scholars providing case studies which found high debt levels with economic distortions, in variables like budget deficits, trade deficits, inflation rates and exchange rates (Dornbusch and de Pablo 1990). Meanwhile others (Elmendorf y Mankiw 1998, 15-22) identified theoretically distortions in the countries monetary policy and the discipline of budget process in the long run. The explicit empirical work of (Hjertholm 1999, 15-16) analyzed the evolution of 4 variables- i) fiscal deficit; ii) exchange depreciation iii) monetary expansion and inflation and; iv) exceptional finance- and founded that they were statistically significant and contributed to economic volatility.

The second concern, researchers recognized that it lead to an increase vulnerability and probability of economic recessions (Elmendorf y Mankiw 1998, 15-22). The reconsideration (Sutherland, et al. 2012) not only confirms the link previously presented, high debt levels also increase the probability of economic recessions, but also produce a higher volatile behavior of investors in present the business cycles.

Political Instability

This scenario is composed of a variety of measures that affect the wealth of citizens; a few examples of these measures can be the rise of taxes or the introduction of new taxes, currency devaluation, expropriation of private enterprises and the capital flow control measures. All encourage a negative discourse of legal uncertainty towards investors. The emergence of high debt burden linked to the idea of higher debt service obligations undermines the political foundation of the tax system, because it compromises the limited state resource undermining public spending.

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The economic situation leads a drop in public investment and public services of citizens. These measures because popular discontent that can lead to critical levels, strikes, public manifestations of the various groups affected groups, a situation that exacerbates states fiscal stance subsequently paralyzing economic activity and undermines the social support of the government.
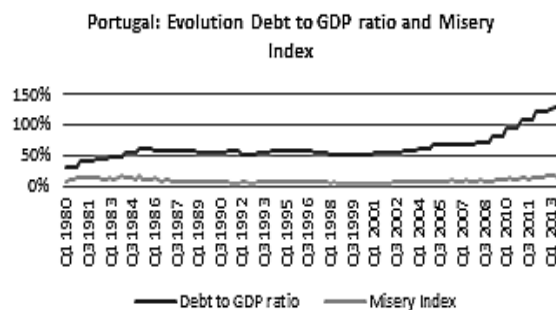
Graphic 3 Misery Index: 1980s to 2013

This creates a dilemma in one hand the increase of popular discontent towards ruling party puts the ruling party to question and by the other if they continue to pay creditors they will lose further support for the next political elections or not pay creditors and main the political power. The future of the political party in office next elections and by the other political parties trying to benefit political gaining public support exacerbates these fears. This dilemma generates fears of suspension of debt payments and unpredictable public policies.
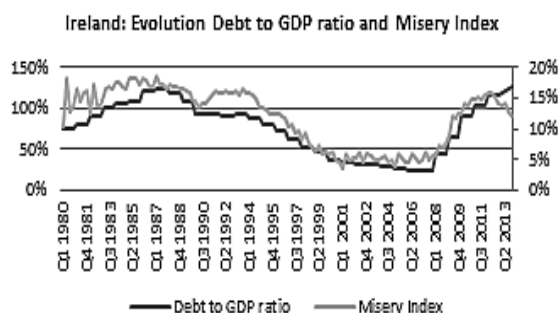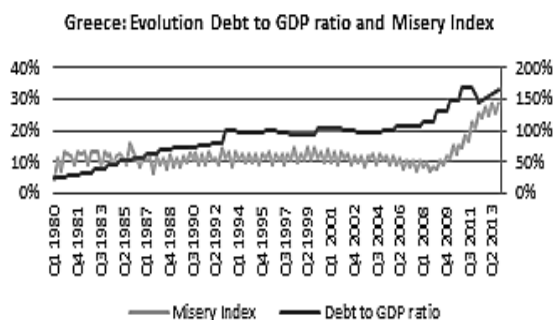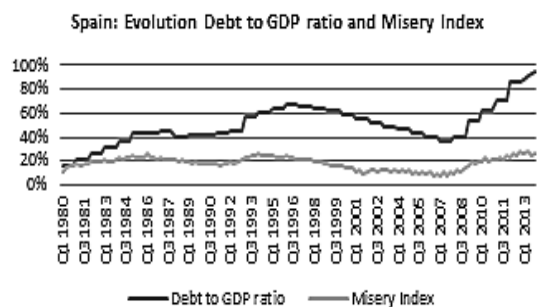
Investment

If the level of external debt of a country is believed to exceed their ability to pay the expected costs of debt service will discourage private investment (Savvides, 1992) and also public investment (Seriux and Yiagadeesen 2001) and (Clements, Bhattacharya and Nguyen 2003) and foreign direct investment causing a slowdown in economic growth as noted by (Krugman 1988), (Sachs 1989), (Cohen 1993) (Green and Villanueva 1991) (Servén 1997) and confirmed this linkage. The volume of investment is altered by investors who may prefer to wait - in - uncertainty scenarios with irreversible investment projects, hoping to get more information, to avoid costly mistakes (Garciandía Garmendia 2011).

This is based on the principle that an uncertain environment and investment fixed, because if it is impossible to reverse the investment there is an incentive to postpone financial obligations pending more information.

Interest rate

The deterioration of the economic situation raises the risk premium for government bonds; the cost level of state funding climbs and this subsequently also increases domestic interest rates. In the long run the high level of indebtedness increases the rate of long-term interest (Baum, Checcherita-Westphal y Rother 2012) and (Laubach 2007). This increase in the risk premium can be explained by changes in the valuation of the State concerned solvency, profitability and probability of default titles. This creates two effects: First, it raises the rate of profit necessary for an investment is held. If there is the same risk of investing in public external debt and make a productive investment if the interest rate paid by the state is higher than productive investment, the private sector will invest in government bonds.
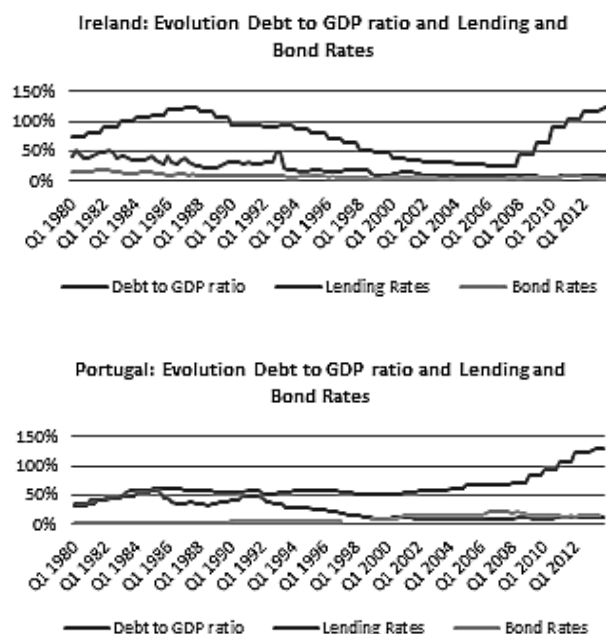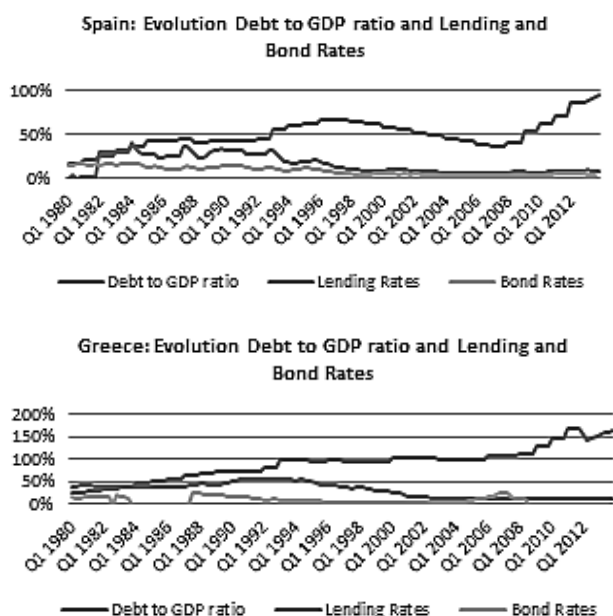
Graphic 4 Interest Rate: Spain 1980 to 2013

Second, commercial banks interest rate rises aimed at undermining the productive activity private spending both households and enterprises (Elmendorf y Mankiw 1998, 18). On the one hand this increases the cost of financing the private sector and the other affects the amount of resources you can allocate the financial system to the granting of loans to the private sector. The mainstream took notice that also erodes external competitiveness; a large influx of non-productive capital raises relative prices (Dornbusch 1989, 334).

Capital flight

The literature (Pastor 1990) (Ajayi 1997) relates the phenomenon of indebtedness and capital flight, these showed that external borrowing generates a series of economic imbalances such as : the overvalued exchange rate, high budget deficits, rise in tax rates, the high level of inflation that stimulate capital flight.

The consequences of this phenomenon related to external borrowing are: i) a reduction in the potential growth of the economy, ii) a decrease in the tax base , and iii) a redistribution of income , ranging from the poor to the rich (Pastor 1990).One can argue that the underlying diagnosis is that capital flight is the response to economic circumstances attributable to external borrowing (J. K. Boyce 1992, 337). Some of this mechanisms have already been exposed but this time stimulating capital flight i) fear of the likelihood of debt crises (Eaton 1987), macroeconomic instability (Fry 1993), (Ndikumana y K. Boyce 2003, 109) and (Dornbusch, External Debt, Budget Deficit and Disequilibrium Exchange Rate 1985) asymmetry of risks associated with the investment (Eaton 1987) and (Khan y Ul Haque 1985) and any detriment of other elements that adversely affect the national rate of return.

Inflation

A country with a high level of debt has an impact on production costs and price volatility generating goods and services to macroeconomic imbalances arising from the debt.

Understanding how debt affects the inflation involves understanding the determinants of it. A simple model of price level in the long term depends on the exchange rate, money supply, wages, the price of exports in the world market, and the prices of imported inputs:

$$P = P(E, MS, W, PX, PM)$$

(1)

Where E is the exchange rate of NOMINAL (local currency per unit of foreign currency), MS is the money supply, W is the average wage nominal.

PX the export price in the world market and PM the price of imports in the world market. MS increases, W, PX and PM tend to raise the price level, while the appreciation of the national currency (decrease in E) tends to reduce it.

First, fiscal expansion crowds out private investment and results in a lower capital stock, which is associated with a marginal product of capital and higher real interest rates, the second effect is through the default risk premium (stop payment).

Spain: Evolution Debt to GDP ratio and Inflation

Greece: Evolution Debt to GDP ratio and Inflation

Ireland: Evolution Debt to GDP ratio and Inflation
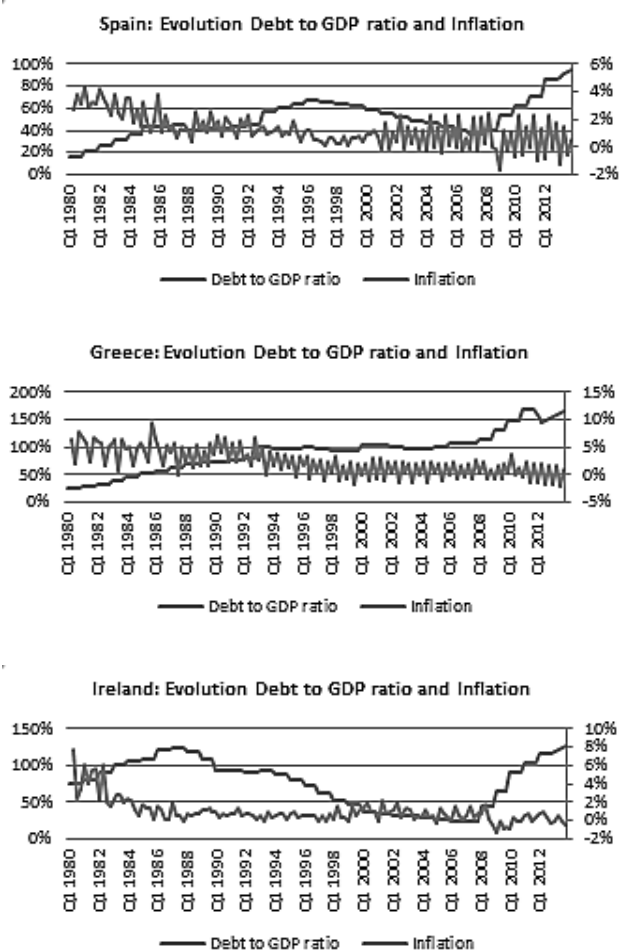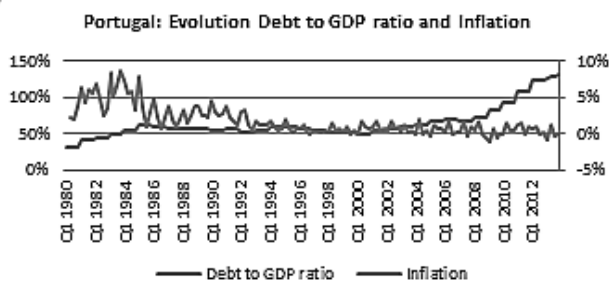
Graphic 5 Inflation: Spain 1980 to 2013

Conclusions

The relationship between debt and poverty was exposed by (Kemal 2001), (Loko, et al. 2003) and (Maier 2005), they found that the high external debt level increases poverty. (Maier 2005, 7-11) identified the following mechanisms. First a highly leveraged impact on poverty through the state budget, the increase in debt service lead to changes in priorities and the level of public investment to the detriment of the most vulnerable sectors of the population. In other words, the state budget constraint requires changes in public investment further hurting the poor.

Fiscal contraction of social spending, further harms the most vulnerable to be the main beneficiaries sectors. The education and health coverage affect human capital assets and transfers: grants, unemployment insurance, etc.

The government employs macroeconomic policy adjustments in order to balance the external imbalance resulting from the high level of indebtedness, among them we can mention the labor reforms in order to lower the employment and unemployment had a negative impact on poverty and currency depreciations that would lead to less internal consumption.

Annexes

Data Source

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Job placement of persons with disabilities in Paraguay: An Economic, social and business vision

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Abstract

Integration of people with disabilities into the work place is necessary for such persons to enjoy their full rights. Employment for the disabled is key to the inclusion of such people in our society, which still holds many prejudiced elements against the disabled. While many companies, public and private, by the laws of our country are obligated to hire a certain percentage of disabled persons, in this article we want to provide a broader perspective, focus on the benefits and virtues, and the weaknesses and fears, that are involved in the recruitment of a person with disabilities for some companies which have no prior experience in doing so. In our country, it is necessary for companies and institutions to make social inclusion and the protection of the rights of their disabled employees a specific priority within their employment policies. In this way, the employer will give the employee the opportunities to work past their disabilities as equals to their non-disabled counterparts. We can create a win-win situation for disabled employees and their employers within our society.

Disability, Paraguay, labor inclusion.

Citation: MOLINAS-BENITEZ, Victor. Job placement of persons with disabilities in Paraguay: An Economic, social and business vision. ECORFAN Journal-Republic of Paraguay 2015, 1-1: 24-31

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Introduction

Disabled people have historically faced barriers which prevent to fully exercise their rights, over time many were marginalized misfortune of prejudices that they could not perform work that could not and should form part of a working group.

Access and maintenance in the workplace provides the person with disability as the rest of society, economic independence, promotes the feeling of social usefulness, self-esteem, by way of social recognition. If we add to this the work from its ethical dimension helps the person to develop as a human being becomes a key instrument in the life of every person and thus in the life of the person with disability, essential for achieve social integration.

The main objective of this material is shown to any person who is in a position to hire a person with disabilities, which are the main fears enter the new, and if there are real benefits for the company; is not doing charity, or a law enforcement, the goal of a company is economic, business and clearly demonstrate prosperity if they bring positive values actually hiring staff with disabilities and make knowledge public policy a government for incentives for labor inclusion.

The following objectives are raised in this research:

- Analyze the socioeconomic benefits of hiring a person with disabilities in companies.

- Identify the issues raised by companies when hiring people with disabilities.

- Propose actions to improve and ensure the integration of persons with disabilities, ensuring their rights as part of business growth.

Identified Problems

Creating jobs for people with disabilities depend much sense of public policies to encourage employment demand by employers and boosting the job from education, training or other discriminating positively to people with disabilities employed or employable.

For the purposes questions arise such as:

- There will part of companies in recruitment?

- It will bring economic benefit to the company or be an extra expense for the same?

- As the government encourages institutions to hire labor?

- The adjustments are really expensive you should do the business for people with disabilities as officials?

Persons with disabilities include those who have physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with other deficiencies.

Will hiring by businesses exist, but state that the fear of the unknown is presented as the first barrier, but in a study in the country about 140 companies shows that only 28% reported having hired a person with disabilities in their company, while 72% did not.
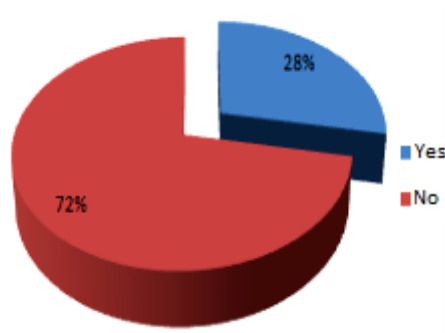
Figure 1 Hiring people with disabilities over 140 companies.

The most important fact is observed in companies that do chose to hire people with disabilities who respond based on their experience which speaks that 97% of companies that have contracted or hire people with disabilities in your company claims to have been a positive experience, while only 3% do so negatively.
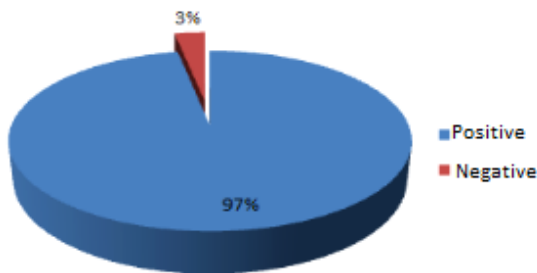
Figure 2

Based on this high level of positive experience it raises the question of how beneficial it is for the company hiring people with disabilities, finding very positive traits.
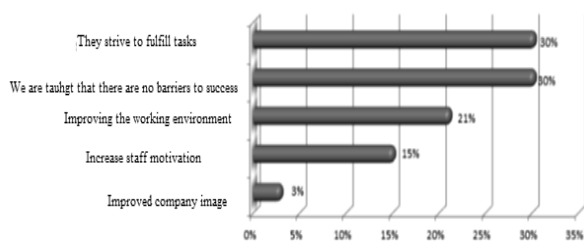
Figure 3

To improve employment opportunities that benefit both companies, individuals and society must have a present state, raising public policy so that it can work together, efficient and positive way.

The most extraordinary revolution of people with disabilities begins when THE CONVENTION comes into force in 2008 ON THE RIGHTS OF PERSONS WITH DISABILITIES years later ratified by Paraguay. From there laws to ensure full accessibility for people with disabilities to society they are created. Law No. 4934/14 called law of accessibility mandatory for public and private companies create compliance.

Mood to work together Law No. 4962/13 "ESTABLISHING benefits to employers, in order to encourage the inclusion of people with disabilities in the private sector," is created. This law better known in Paraguay as tax incentive law that benefits from the reduction of value added tax (VAT) of companies that comply with the law, plus a bonus of just over $ 2000 to improve the accessibility of the company.

One of the most rooted in the Paraguayan myths and corporate culture is to make structural modifications to accommodate a person as an official with disabilities cost a lot of money or a lot of investment demand. In several studies, the World Bank concluded that the cost is minimal when these elements are incorporated at the time of construction. It has been shown that making buildings accessible, just add less than 1% of construction costs.

Rationale and importance of the topic

Under the circumstances, it is not surprising that there is little relation between disability and poverty.

According to UN statistics, 82% of people with disabilities in developing countries live below the poverty line and is among the most vulnerable and marginalized; It is estimated to represent between 15 and 20% of the poor in these countries. In the coming years you will need significant and sustained measures to promote the inclusion of people with disabilities in employment promotion programs, rural development and poverty reduction; the aim is to provide opportunities for productive employment and decent work for persons with disabilities and to move towards the realization of Millennium Development Goals such as poverty reduction, allowing States to benefit from their contribution to the economy and society and avoid high costs arising from exclusion.

If we consider living in a society of equal rights, but fruitful in the economy, with solid growth and significant numbers in the gross domestic product (GDP), the state must ensure compliance with the rules; employers need to be certain that you can find profitability in a group of officials who can work equally or better than another, to see on people with disabilities are potential to successes individuals, they can grow personally and grow the company they serve.

To find the balance between the right and benefit, to have responsibility for the development of quality goods that can extol the result of joint work between government, business and civil society staff.

Disability and Work

Decent work, quality is the most effective way to break the vicious circle of marginalization, poverty and social exclusion mode. Disabled people are trapped in this circle often, and positive action to help them out of this situation is necessary.

The barriers that disabled people face in getting jobs and taking their role in society can and should be overcome through policies, regulations, programs and services.

People with disabilities represent a huge source of untapped human talent. However, as a group, they are too often excluded from society and the workplace, as well as experiences as a good, market-oriented education that could provide the basis for a contribution to their workplace training and development of the economy of his country.

But often we lack data nationwide, worldwide people with disabilities:

- They are less likely to get an example that people without disabilities.

- They have less chance of being the register as employed or unemployed, and therefore are invisible to the labor market

- When they work, they are more likely to do so in low-paid jobs with little prospect of promotion and poor working conditions.

The situation is even more difficult for women with disabilities, who have even less access to non-disabled women or disabled men decent work.

Under the Code of practice of the ILO for managing disability in the workplace, the ILO defines persons with disabilities as "any person whose chances of obtaining suitable employment, re-employment, maintain employment or progress in it they are considerably reduced as a result of a duly recognized physical, sensory, intellectual or mental impairment.

The associations of people with disabilities and employment

You can not explain the increased attention in government and society to the problems of integration of persons with disabilities without the decisive role played by the social economy and, very specifically, by its sector associations.

In the beginning, the associations of disabled people effec- tively little attention to initiatory employability, dedicated almost exclusively to support work, counseling and mutual support among members. However, since the eighties, the voluntary sector of the disabled has been a pioneer in the development of projects leading to the employment of these people, whether in social enterprises promoted by the industry itself, either in traditional private companies and in the public sector, pushing for policies That Work various jobs for people with disabilities are deployed.

Major roads integration of people with disabilities

If we disregard the family component, present in all stages of life, the social integration of people of working age with disabilities is achieved through participation in three interrelated systems:

– The Pension

– The Housework

– Remunerated job.

The difficulties that any citizen to enter the labor market are increased in the case of people with disabilities, as are added other difficulties and specific barriers they have to overcome:

– Social barriers, making the differences between people grounds for rejection, limited opportunities and social marginalization.

– The physical environment barriers that limit or prevent access, mobility or communication.

– Psychosocial barriers, such as excessive family protection, education and training deficiencies, lack of motivation, lack of information and guidance

– Mental or barriers all the consequences that this generates in the disability itself, which feeds their self-exclusion from the labor market and makes it dependent excess protection policies

Worldwide there are approximately 470 million disabled people of working age. While the information available about their employment status is incomplete and international comparisons are difficult to establish, it is clear that the deficit of decent work affects people with disabilities than the rest. Many women and men with disabilities are unable to find decent jobs even after having completed training, which can lead to frustration and undermine their aspirations. Discouraged by discriminatory barriers and prejudices wrong about their ability to work, many leave the active search for a job and rely on disability benefits, where they exist, or barely survive a low value added work in the informal economy with the support They offered by their families or the community.

Employment options for people with disabilities according to the needs of 140 companies in Paraguay

When asked about the charges that could occupy the Disabled in Public Institutions, tell us that in Customer Service (89%), administrative (85%) Ordinance (59%), Technical (56%), Operative (52%), General Services (48%) and recorder (4%).
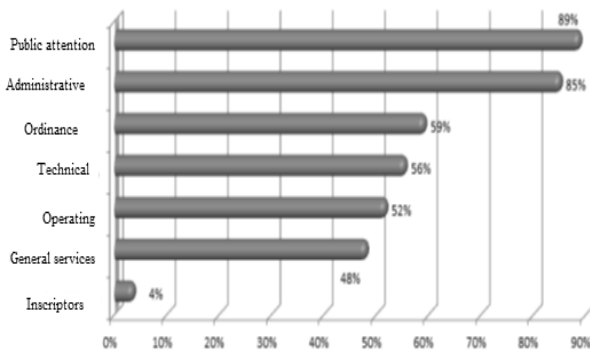
Figure 4

Legal framework

The Constitution of the Republic of Paraguay in Title II recognizes the fundamental rights inherent to the dignity of the human person and the development of free personality, establishing a precise system of guarantees for their safeguarding and legal protection under the principle of separation of powers:

Article 58 - RIGHTS OF PERSONS exceptional people to be guaranteed the attention of their health, their education, their recreation and their vocational training for full social integration. The State shall organize a policy of prevention, treatment, rehabilitation and integration of physical, mental and sensory disabilities, who will provide specialized care they require. They recognize the enjoyment of the rights that the Constitution grants all citizens of the Republic on equal opportunities, in order to offset their disadvantages.

Article 88 - Nondiscrimination No discrimination shall be permitted between workers on ethnic, gender, age, religion, social status and political or trade union preferences. The work of persons with physical or mental limitations or disabilities shall enjoy special protection.

Law 3540/08 "by approving the convention on the rights of persons with disabilities and optional protocol to the convecencion on the rights of persons with disabilities"

Law No 1925-1902 "by approving the inter-american convention on the elimination of all forms of disriminacion against persons with disabilities"

Law 36/90, 159 CONVENTION ON APPROVING THE CONVENTION vocational rehabilitation and employment of disabled persons (Convention 159).

Law 2479/04, which establishes the mandatory inclusion of people with disabilities in public institutions.

Law No. 4962/13 "establishes benefits for employers, FOR THE PURPOSES OF INCORPORATION TO ENCOURAGE PEOPLE WITH DISABILITIES"

Conclusions

Accessibility in relation to labor law is a difficult but essential task to build a more egalitarian society that involves the removal of all barriers both physical and social, avoiding the fear of the unknown.

Studies show that experiences in hiring people with disabilities in Paraguay in an approximate 79% rate that people with disabilities have the same performance as people without disabilities and almost 15% say they have increased performance and generate good results within the company to improve the work environment.

Both the Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights recognize the extremely important work as a human right that allows a person to develop their potential, to feel useful and independent, enjoy income to cover expenses daily life, having social security and enable them to develop individual in society and be productive.

Precisely for people with disabilities to have equal employment relative to the rest of the population entails not only the exercise of a right that is inherent but also a tool to increase their independence and inclusion in society.

Labor inclusion as business, social and economic group represents the spark that can ignite the engine of accessibility overall. For the entrepreneur is not about making charitable or comply with laws, it is generating the prosperity of the company where they can have a great contribution in building a more prosperous work environment where partners feel more at tastes and see the ability to overcome others to value and motivate them to perform to the best of their functions. Society for an increase of equal quality to see people, breaking myths and largely rooted in our culture schemes, the existing segregation, limitations that are given as a society in this still vulnerable sector. As economy is a prosperous economic growth, play it more valuable for a country and the only thing that can lead them to be a respectable nation human resources.

Recommendations

In a society where the full enjoyment of the rights of the people is guaranteed, it is essential jobs, it is a powerful tool of inclusion which in turn can become valuable raw material for a company that can be found in people with potential disabilities to leave great benefit to them why it is recommended:

- As a business that flourishes and commitment to innovation, hiring people with disabilities a perfect ally becomes it is a still undiscovered human resources with great potential in many countries of the world have acquired skills and competencies companies they need and demand.

- Hire people with disabilities and uplifting the morale of co-workers therefore is a valid tool to motivate employees.

- The business reputation of civil society, the general public has a positive impression over companies that hire people with disabilities.

- When starting a business with a building structure, if the planning structures accessible add, has a negligible cost becoming a very reasonable investment.

- When hiring, analyze and get the results on the staff, spread both positive and negative information to encourage and banish ignorance on the subject.

- Always work in conjunction with the state and members of civil society, foundations that can provide expertise to the creation of policies that benefit all sectors.

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Funding decisions on SMEs in Paraguay. Analysis from economic theory

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Abstract

MSMEs are the engine of the economy, not only nationally, but internationally. The first impediment we will find at the time of its study is the lack of information, especially statistical, even though it does not to prevent us from knows the magnitude and the importance of it for the development of an economy. The main objective of the financial markets is to provide liquidity, security, transparency and to provide sufficient information about the company and the economy of a given market. In Latin America obtaining resources has become a very difficult task, and usually when it is achieved, it comes in very volatile conditions with very high interest rates. Another reason that makes the situation worse is the low participation of companies in these markets due to the lack of financial market culture. Financial structure decisions in a company, regardless of their size, are vital to their economic survival and for the creation of value of a company. This decisions can be grouped into investment decisions and funding decisions. The main objective of this investigation, are "funding decisions", which are already well known in the business world. The company can basically be financed in three ways: Own Resources or retained earnings. At the same time can be financed through debt or capital from others. Finally one option is to obtain resources through the issue of shares.

MSMEs, financial structure, financing

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Introduction

MSMEs (Micro, Small and Medium Enterprises), are the main source of job generators in Paraguay as well as in most Latin American countries.

The importance of industry as a generator of jobs indicates the importance of micro industries, which, according to the Industrial Survey 2002, 75.5% of the labor used in the sector, was engaged in micro industries, 18.5 % in SMEs (small and medium enterprises[2]), and only 6% in large companies. Among the main industries MSMEs are: food, beverages (beer, spirits and soft drinks), chemicals, clothing, bakeries and tanneries, to name a few.

As for the economy and money supply, it can be mentioned that the national currency is the Guarani (Gs) since 1943; the exchange rate is freely floating and fluctuates between 4,500 and 5,000 guaraníes per dollar. Its GDP per capita is US $ 5,500, and the projection made by the International Monetary Fund suggests that this year will rise to US $ 5.294.

As for the main indicators of socio-economic developments, Chamorro (2006) notes that these suggest a "moderate growth, but without having reached significantly transform the structural characteristics of the Paraguayan economy, which remains highly dependent on the sector rural".

This is attributed to the lack of existing technology, low capitalization, unskilled work, narrow domestic market, coupled with the inadequate exploitation of the resources it has.

National Context

The economic characteristics of Paraguay are those of a developing country, where its production comes mainly from primary activities, namely agriculture and forestry. The economic organization differs in the two regions (East and West), in its main production activities, as both have very different physical and climatic characteristics. In the eastern region is a great variety of natural resources that can provide major economic benefits to the country. One of the main resources are there, is the cattle, and other poorly exploited as the soil fauna (mammals, fish, birds, reptiles), flora (forests, medicinal plants, textiles, fruit and yerbales) mineral resources (limestone, granite, kaolin, marble etc.) and water potential.

In Western or Chaco region, there are two sub-regions: Alto Chaco, which is a plain which does not exceed 300 meters above sea level, and Lower Chaco lowlands with declines towards the Paraguay and Pilcomayo. Chaco wealth is based on its livestock and her most devoted inhabitants. As for agricultural production, this has been increasing in recent years, particularly in the Mennonite settlements, which constitute an important agro-industrial center, growing cotton, peanuts, soybeans, castor beans, among others. As for industry, there are sugar mills, processing plant, steel, oil of rosewood occurs, in addition to those developed in the Mennonite colonies, which is dedicated to producing oil from castor beans, cotton and peanuts, and manufacturing dairy products.

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2 The size of the economic units was defined taking into account the following criteria: Micro and small: from 1 to 10 employees and annual income less than or equal to 300 million Guarani. Medium: 11-49 persons employed or annual revenues to 300 million to 2,000 million Gs. Large: 50 or more employees or more annual income of 2,000 million Gs.

In terms of population, has a total of 6,600,284 inhabitants, of which 80.4% are of working age, but only 3,412,443 people are the PEA, which represents 51.7% of the total population, while unemployment for the same period is about 5%[3].

As for the distribution sector of economy, 27.2% of the economically active population (EAP) is working in the primary sector, 16.1% in the secondary and 56.7% in the tertiary[4]. Of those devoted to the primary sector, 45% perform work in agriculture, usually on small plots, where crop care is in charge of the family; in some places it has in other agricultural enterprises and agricultural cooperatives, boosting agriculture, exploitation and commercialization. The agricultural products for export are: snuff, cotton, soybeans and coffee.

Livestock constitutes the second pillar of the national economy, especially the cattle farm. It should be noted that over 50% of the country is occupied by livestock, as shown in the following chart.
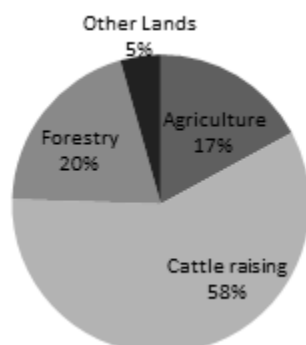
Figure 1 Use of the land, 2005

As for the industry, this takes place mainly in the capital and its surroundings. Industries based on agricultural raw materials are sugar, textile mills, flour mills, yerba mate, almidoneras, oil, tobacco and preserves; and using livestock raw materials are: refrigerators, canned, meat and dairy derivatives leather; the forestry building materials, car bodies, furniture are derived, among others.

According to the National Economic Census 2011, 91.5% of non-financial economic units[5] are micro and small enterprises, 5.6% are medium and only 2.9% are large. MSMEs (micro, small and medium enterprises) occupy the 65.2% of the EAP and generate revenues of only 10.2%, while large companies that occupy only 34.9% of the EAP generated 89.7% of total revenues.
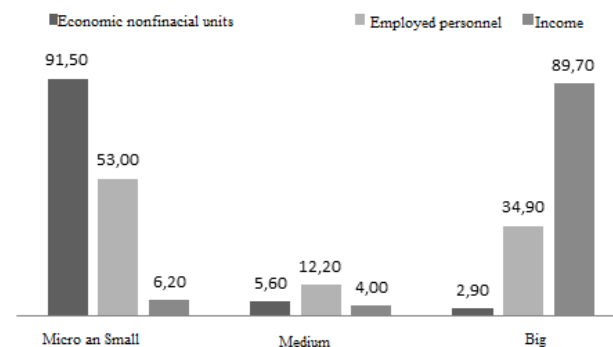
Graphic 1 Percentage distribution of non-financial economic units, persons employed and income by size, 2011

Financial situation of Paraguay

Paraguayan history is made up of long periods of concentration of political, military and economic powers. The concentration of improvised, paternalistic and authoritarian rule burdened the people and canceled the initiative of private companies.

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[3] Data from the Permanent Household Survey 2012.

[4] (Department of Statistics, Surveys and Census, 2013)

[5] Non-financial economic units are those engaged in activities other than the provision of financial services and insurance.

These conditions do not permit the development of a capital market or a stock exchange, boosting economic development, domestic savings and attract external resources. Although the rise of the stock market and its gradual and mandatory use in an increasingly globalized world is recent, its creation dates back to September 28, 1977, under the chairmanship of General Alfredo Stroessner, where the stock exchange is created and Assumption products, becoming Corporation (BVPASA).

The BVPASA was idle since its inception until 1991, when the most renowned environmental entrepreneurs meet and agree to send a project executive for the creation of a market for assets and an entity that controls it. In the same year No. 94/91 Securities Market of Paraguay, whereby the need for the start of trading is created Legal Framework Law is promulgated. Similarly, by this means the National Securities Commission, which will act as regulator of this market, is created.

This new law offered to the bag, the opportunity to consolidate organizational and technologically, carrying out constant training during 1992 and part of 1993, both officials and other young professionals who interact in the new market.

The date of commencement of operations at the stock market in Paraguay dates back to October 11, 1993, when the first round of negotiations took place, participating in it, a total of nine issuers. The law currently governing the operations of the Market of Paraguay is No. 1284/98, enacted in 1998, which comes into force on August 3, 1999.

"The Paraguayan Securities Market is relatively new compared to other markets in the region, but their attractive yields and with a level of reliability shiny" and describes one of the most important environmental brokerage firms, securities CBSA. With the creation of this new market, it has attempted to transform the financial culture of the Paraguayans, encouraging the use of alternative means of investment and financing, albeit moderately efficient management of its participants: regulators, stock exchanges, houses firms, issuers and investors (Securities Brokerage, 2015).

A tool launched recently by the BVPASA includes the participation of SMEs in the stock market since the creation of this. It was not until 2011 that were well established bases so they could enter and issue debt securities and thus be funded. The president of the National Securities Commission (CNV), Jorge Schreiner, told a news medium, "with the participation of SMEs in the Bolsa de Valores y Productos de Asunción (BVPASA) was also achieved them to improve their levels transparency in administration, because they have to go through a change of management culture that expose data access on their business "(trading volume, 2011).

The challenge for Paraguay, has always been to increase financial depth safely, ie avoiding excessive credit booms that end in financial collapse. The evolution of credit extended by the financial sector has always been an uptrend as shown in Table 1. This, as indicated by the IMF, can be dangerous and tip over in a crisis, excess liquidity in the market.

The following graph shows the evolution of credit extended by the financial sector, which increased from 7,212 billion Guaraníes (approximately 1,400 million) in 1997 to 34.500 billion guaranies (about 6,900 million dollars) for 2011 is observed; of Similarly it increases five times in fourteen years (1997-2011).
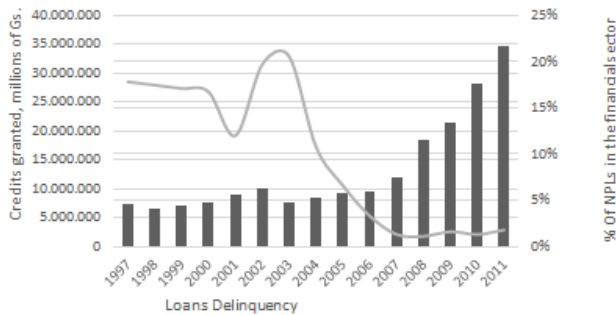
Graphic 2 Total portfolio of loans in million Guarani (left axis) and delinquency rate (right scale), 1997-2011.

Paraguay's banking system has many weaknesses, among which we can mention the rapid credit growth and slow fundraising. The problem of late payment is not Paraguay, but on the contrary, the low default (as shown above), which results in the increase of loans granted by banks, but such loans are granted long-term and recruitment of resources is done in the short term, so-called deposits, here the mistake in the temporary mismatch.

The increase in loans is comparable to the way it has increased Paraguay's gross domestic product, keeping both in the same path in both boom and decline, at least for the latter observed decade, which retains an uptrend since 2005 (Central Bank of Paraguay, 2015).

During the nineties, the portfolio suffered a weakening in the wake of the banking crisis and the insufficient capital, which weakened the financial system, and as a result, the situation had to be adjusted by means of the Law on Banks (No. 861 of 1996) which repealed the previous General Law on Banks and other financial institutions, thus reformulating a number of prudential standards. These regulatory changes and maturation within the Paraguayan financial sector have made banks are consolidated in recent years.

Importance of SMEs

SMEs transparency is vital, because usually it is family businesses with little or no documentation of transactions, making it difficult to control process and hinders the management of resources.

It is pertinent at this point, noting that "there are inconsistencies in defining small and medium enterprises. The definitions depend on the size of the economies and of the qualitative or quantitative criteria to be taken into account "(Acuna, 2003), besides the participation of these differs in the economy and especially in the GDP of different countries. In Paraguay, MSMEs are classified by a number of factors, including: the quantity of labor, fixed assets and annual turnover. According to Law 606/95, for which the supplementary Guarantee Fund is created, MSMEs are classified as shown below:

Classification	Number of persons employed	Total Assets (Guarani)	Annual turnover (Guarani)
Microenterprise	Less than 5	Up to 23 million	Up to 70 million
Small company	5 to 20	Up to 92 million	Up to 271 million
Medium-sized business	From 21-100	Up to 460 million	Up to 1,355,000

Table 1 MSMEs classification

The importance of SMEs in Paraguay, mainly lies in the ability to create jobs and the number of establishments with which it is told, rather than the amount of their income, which are only 10% of total production revenue of goods and services. Globally, as mentioned Acuna (2003), SMEs are generating 64% of employment and regional development base; You talking about Mercosur, at the beginning of this century, already had 30 million SMEs between the United States, the European Union and Mercosur, and to get an idea of international experience we can add that in Germany already operating 3 million SMEs, which generate 70% of jobs and 45% of GDP.

Size of economic units	Non-financial economic units	%	Employed personnel	%	Revenue (in billions of Gs.)	%
Micro and small	204,286	91.52%	390,059	52.95%	14,181	6.23%
Medium	12,532	5.61%	89,620	12.17%	9,151	4.02%
Big	6,402	2.87%	256,920	34.88%	204,264	89.75%

Table 2 Distribution of non-financial economic units, persons employed and income by size, 2011.

SMEs, as already mentioned, have their potential in employment generating capacity within these; the population is concentrated in micro enterprises and self-employed. Studies by Ramirez (2007) showed that small and medium enterprises (SMEs) have a critical role in Paraguay, because on one hand create jobs in a significant amount and, on the other hand, have low capacity levels provide better stop income employees. In short, micro-enterprises, labor occupying a greater extent, provide lower-income employees, and large companies offer higher wage income, but employ fewer labor.

Category	Size (according to number of employees)	1999	2003
Private employee		1,539	1,365
microenterprise		1,059	889
SMEs	1 to 10	1,544	1,687
Big	11-50	2,294	2,349
Private workers	More than 50	924	764
microenterprise		714	581
SMEs	1 to 10	1,120	912
Big	11-50	1,175	1,056
Employer or Pattern		2,781	2,828
Own account		557	568

Table 3 Average monthly income in the main occupation (in thousands of Guarani).

According to the "Study on policies, institutions and programs to support MSMEs" (2006), indicates that the Paraguayan Federation of Micro-entrepreneurs (FEPAME) was conducted in December 2004, market research in the framework of the Technical Cooperation Inter-American Development Bank (IDB). The survey yielded the following data:

- 51% of micro enterprises doing business,

- 26% offer services,

- 23% are engaged in production activities.

An interesting observation is that only 23% of companies engaged in the production activity, the rest does not occur. The major constraint to production and industrialization is the low-tech and innovation, therefore, growers cannot give added value to their products, which compete in the local market with imported from neighboring countries and other parts of the product world. This demonstrates the importance of the fact of having a support system, whether governmental or private, for this sector, in order to orient them so that they can add value to their products and to sell them in foreign markets and thus greater profitability and sustainability, which can reflect both micro and macro level.

Main problems of MSMEs

Edgardo Acuña (2009) divides the problems of MSMEs into two groups, qualitative: technological innovation, training and access to markets; and quantitative: pension charges, tax burdens and financing. The problem of MSMEs in Paraguay is not unlike the problem of MSMEs in Latin America and in the world, all or at least most of them have a common obstacle: the lack of access to credit.

MSMEs in Paraguay, in 2011 occupied 65% of the economically active population and 90% of companies were classified into this category. In developed countries, this sector is large, so programs that help solve problems that commonly occur and that are why international agencies also devote large resources to this sector (Liliana C. Galan et al, 2007) apply.

Companies generally tend to seek sources of funding that are competitive, and often start with all kinds of debt, usually known as passive, especially with all sorts of others, including first suppliers. For this source of funding is competitive, it must be obtained at low cost, and the cost of obtaining this resource, less than the expected returns of the resources invested in the company.

Another important factor is funding decision agency costs. These costs stem from conflicts of interest between the principal (owners, shareholders,) and the agent (professional managers), in whom the first delegate a part of decision making.

To evaluate the financing options that are available, the traditional economic theory proposes Modigliani-Miller Theorem (1958), which is based on the hypothesis of efficient markets. As mentioned Georgina Núñez et al (2009), "with the Modigliani-Miller Theorem in the absence of risk, it does not matter how the structure of the company is financed because the owners of the companies are Ricardian - always investors will offset its own portfolio so do the company- except when tax benefits that lead him to a corner solution, in the case of the company."

Modigliani and Miller proposed, given certain assumptions, such as the absence of tax break costs, agency costs and absence in the asymmetry of information-than-average cost of capital for any company (regardless of size) is independent of its capital structure; and if this does not hold for all cases, there may be arbitration and can cause imbalances in the value of the shares.

The theory proposed by Modigliani-Miller, takes place in a market where companies decide which financial resources to use are, whether they will use financing or own or both resources, where the ultimate goal is to minimize the cost of debt maximize the value of the company.

How are funded MSMEs in Paraguay?

Companies have several ways of finance, although the Paraguayan entrepreneurs prefer to invest its own funds rather than borrow, for two main reasons: ignorance and the request of many requirements by the institutions. According to the Survey of entrepreneurs / as urban by the General Directorate of Statistics, Surveys and Censuses (DGEEC) 2009, more than 30% of the surveyed entrepreneurs prefer to use their own resources. 17% did not know of the existence of credit offers, 14.5% think it is not subject to credit and 9.6% consider asking many requirements. A very small percentage of these, 5.4%, currently has credit, and an even smaller percentage, 1.2%, has had bad experience with credit.

Reasons	Male	Female	Total
Prefer their own resources	27.8	35.5	31.3
No need	13.3	23.7	18.1
Considered not creditworthy	16.7	11.8	14.5
They ask many requirements	14.4	3.9	9.6
Credit is currently	6.7	3.9	5.4
The stakes are very high	2.2	2.6	2.4
He has had bad experience	2.2	0.0	1.2
Another reason*	16.7	18.4	17.5

Table 4 Reasons for not seeking credit.

MSMEs in general, face problems of access to credit, this usually happens by the lack of sufficient collateral, high interest rates in the market, excessive bureaucracy in demanding documents and finally a very important factor: the lack of a business plan that allows them to microentrepreneurs know the importance of access to credit. As Esparza, Monroy and Granados (2012) mention, in the economies of emerging countries, as is Paraguay, the survival of these businesses is subject to a "lack of access to finance and business advisory, management and inefficient not professionalized human resources, ignorance of market opportunities and lack of new technologies and production of low quality".

Besides the lack of access to credit, it stresses that when MSMEs gain access to credit, these are relatively low; the highest amount provided by banks is approximately U $ S 2,000, and only 17.9% of the entrepreneurs seeking credit access this amount also are short term, the majority, ie 44%, are within 6-12 months and a very low percentage, 1.8% are those with a deadline more than 48 months (see Annex 2 and 3).

This situation was growing worse, especially after the economic crisis of 2008, since in Paraguay, as in the rest of the world, the lack of liquidity in the global financial system, which led to contract to supply lending to MSMEs, increase interest rates and demands for access to credit, considered this a high-risk sector and the most vulnerable.

Another immediate consequence of the crisis was the dramatic decline in demand for products, especially meat, oilseeds and cereals.

In the case of Paraguay, they decreased international demand, especially from the United States, European Union and China; by Peralta (2009) fell exports of commodities, which account for over 90% of the value of total exports. The negative effect was greater, due to the decrease in the volume of exports, but also in the price of goods. The decrease in these exports mainly affected exporting SMEs, and indirectly those providers MSMEs.

In the Modigliani-Miller theorem (MM) it proposes that companies can be financed partly with shares and partly with debt, but in the case of Paraguay are broken down as follows:

– Own resources

– Partnerships

– Financial

– Cooperatives

– Suppliers

– Debt Banking

– Capital market

Of these instruments, the holders are own resources, because the employer would prefer not to engage in debt, then follows suppliers, since it is easier to acquire debt to them because they have many needs, but if you fall into default, all the operation of MSMEs in danger. Among the least preferred by employers, are bank debts, which by its high interest rates make it less attractive this traditional form of financing. But in addition to high interest rates, you should see that there is some rationing of credit for some economic sectors, including MSMEs.

Research by FEPAME in 2004, also sheds how MSMEs are financed in Paraguay, which, contrary to what one thinks about the financing with its own resources, it was found that only 17% are financed equity and the remaining 83% do so through:

- Partnerships: 58%

- Cooperatives: 16%

- Financial: 26%

For 2009 the appropriations requested by MSMEs were the following institutions:

Institutions	Man	Woman	Total
Cooperative	65.1	74.4	69.6
financial	16.3	13.4	14.9
Commercial bank	9.3	4.9	7.1
Agricultural Credit	1.2	0	0.6
Usurer	3.5	3.7	3.6
Other	4.7	3.7	4.2

Table 5 Percentage of appropriations requested by institution.

The constant presence of cooperatives and financial in financing MSMEs, it is often because in the first, just to be a member you have access to credit or support, therefore, most of the loans are one signature (see Appendix 4), and financial, because they have so many requirements as banks, but high interest rates and credit rationing, and both credit institutions are short-term.

MSMEs investment is hampered by the lack of long-term loans, which make these fall into a dangerous leverage by having to finance their long-term investments with short-term loans (Liliana C. Galan et al, 2007).

The same author notes that in most Latin American countries do not have protection for creditors, referring to previous studies by authors such as "La Porta et al. (1997, 1998), Galindo and Micco (2001) and Kaufman Krauf and Mastruzzi (2003) "who have worked on this subject and have come to the conclusion that the protection of creditors' rights is linked to the elements They comprise the set of laws and institutions that are present in this process.

On financing of technology currently in the country, this is mostly funded with resources from companies. Ramirez (2007) adds, "in this way, access to financing for the purchase of equipment remains a constraint which limits companies increased their production and, therefore, their export." Not having access to funding and be funded either with its own assets, he condemns MSMEs to its demise. At this point, it is noteworthy that 90% of MSMEs is limited to their heritage as the sum of 10 million guaraníes (approximately US $ 2,000 S) (see Appendix 5).

According to the Survey micro / urban as (DGEEC, 2009), microentrepreneurs investments are mainly for the purchase of raw materials and / or goods, although the percentage of these varies according to gender. For example, women spend 50% to the purchase of goods and raw material, and only 11% for the purchase of machinery and tools, while men spend 23.3 and 24.4% respectively.

Investment type	Man	Woman	Total
Purchase of machinery and tools	23.3	11.0	17.3
Purchase of raw materials and / or goods	24.4	50.0	36.9
Purchase, repair / expansion of the local	7.0	4.9	6.0
Purchase of animals	3.5	0.0	1.8
Pay debts	9.3	11.0	10.1
Repair or expand your home	16.3	7.3	11.9
Other	16.3	15.9	16.1

Table 6 Destination of the credit requested (%).

Microentrepreneurs have little ability to save, only 12% of them can save, and most of them do in cooperatives, although some continue to use outdated methods and save at home. A small part saves in state banks, including the National Development Bank; 10% do so in commercial banks and 3% in financial (United Nations Development Programme, 2009).

Annexes
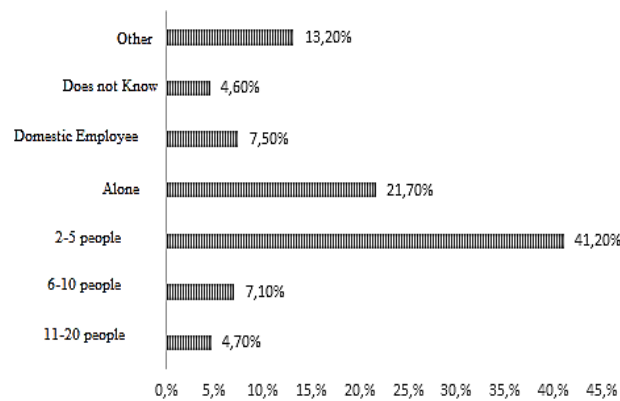
Annex 1 Employment by size of enterprise, 2011

Ranges	Man	Woman	Total
up to 1 million	10,5	23,2	16,7
from 1 to 2 million	24,4	25,6	25,0
of 2 to 3 million	11,6	8,5	10,1
of 3 to 5 million	14,0	15,9	14,9
from 5 to 10 million	19,8	11,0	15,5
more than 10 million	19,8	15,9	17,9

Annex 2 Amount requested (%).

In months	Man	Woman	Total
up to 6 months	14,0	13,4	13,7
6 to 12 months	39,5	48,8	44,0
12 to 18 months	12,8	13,4	13,1
18 to 24 months	19,8	15,9	17,9
24 to 36 months	8,1	6,1	7,1
36 to 48 months	3,5	1,2	2,4
more than 48 months	2,3	1,2	1,8

Annex 3 Delivery of funding requested (%)

Types warranty	Man	Women	Total
A single firm	72.4	77.6	75.0
cosigner	18.4	18.4	18.4
mortgage	6.6	1.3	3.9
pledgee	1.3	1.3	1.3
Other	1.3	1.3	1.3

Annex 4 Classification of credit by type of collateral (%).

Total Assets	Total
Up to 10 million	90.8
Of 10-20000000	4.9
Of 20-35000000	1.5
More than 35 million	2.8

Annex 5 Registration of active MSMEs

Conclusions

Despite the lack of financing, SMEs have competitive advantages over large companies, which are in their ability to adapt quickly to identify and anticipate the changes happening in the market, all this because of their size. But its main drawback is made that put you at a disadvantage compared to other actors in the economy, which is known as "market failures" as the cost of capital, which is not equal the cost for those operating in the market values or internationally funded so that for MSMEs. So the possibility of using the Modigliani-Miller theory, for future evaluation of the forms of financing MSMEs in Paraguay is discarded.

The information available to the company is a fundamental tool when applying for a loan, therefore, it is essential to check balances, financial situation and technical aspects of the project. Often this information is not completely reliable, and banks find it difficult to know the intention of customer payment.

The difficulty in assessing the credit risk of these businesses, by the bank, is often due to incorrect information provided and the lack of specialized personnel in this area. It is therefore not surprising that the main provider of these resources are cooperatives and associations, as they are the ones that have greater access to reliable information and personalized service to MSMEs.

After analyzed the possibilities of financing available, it is concluded that the expansion and success of companies is subject to the availability of equity and the limit given by its current assets, which, as mentioned above, amounts (in most cases) to 10 million Gs. This behavior is basically because financing options are subject to the traditional bank-client relationship, where outweigh the criteria are directly linked to the solvency of the company and the property guarantees that they can offer, before that the basic needs of any growing business.

Recommendations

The limited funding to MSMEs, weakens the local economic system, because of its great implication in the national economy. The funding should be accessible to all those involved in production processes that create economic synergy from this. It would also be advisable that the supply of credit to be extended, and the deadlines.

For there to be a genuine process of financing through the stock market, you should create favorable conditions for the population in general to acquire financial literacy, relaxing the interaction between actors and that in turn provide guarantees for all participants, both investors and issuers.

And finally, the government should establish guidelines so that investment is generated in these sectors, either through programs of social economy through government, or with the introduction of legislation to protect (domestic and foreign) investors, so that they can make their investments safely within the country towards greater economic growth and social welfare.

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Economic growth and external constraints: Evidence of Thirlwall's Law for Paraguay 1994-2012

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Abstract

This paper addresses the economic growth of Paraguay in the period 1994-2012 by Thirlwall's Law which states that stable growth must be consistent in equilibrium in the balance of payments. Three estimates of model Thirlwall are made, the first considering only to Brazil which is the main trading partner of Paraguay was estimated by univariate OLS, in a second model is considered to Argentina, Brazil and Mexico in an MCO multivariate system, and the last estimate a VAR model between imports and GDP. In the case Portugal is no external constraint is observed, due to the sustained surplus in the trade balance, mainly associated with the sale of energy.

Economic growth, law, Paraguay

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Introduction

On the theoretical level is still unknown what determine economic growth, there is a set of theories which partly explain the phenomenon, however the reality is that none has been able, by itself, provide a convincing explanation. Economic growth, explained mainly by the supply side, is determined by the accumulation of physical capital (Solow (1956)), Investment (Harrod (1939) -Domar (1947)) and human capital (Lucas (1988)), Romer (1986)), however these optical leave out the demand and its approach considers a closed economy (without trade or smoothing course of balance in the current account), ie, in an interconnected world these Theories explain only partial and insufficient economic growth.

The neoclassical theories with empirical tests have had mixed results confirm the theory and some other invalidate. Solow (1956) does not explain the economic phenomenon because it is based on unrealistic production function as input provides a measure of the capital stock of hard to build and has received mixed reviews during the discussion of the two Cambridge.

Harrod's model (1939) -Domar (1946) works to "knife edge", any mismatch leads us to a continuing imbalance and indefinitely us away from the path of stable equilibrium, this model predicts a downward spiral during crises and explosive growth during the boom, in reality none of these situations is observed.

The human capital model based on the assumption that the skilled labor increases production, work of Romer (1986) is not considered only the accumulation of physical capital but also knowledge.

It is that when a company invests it generates learning process (due to practice) that all firms in the economy is disseminated without the possibility that individual company will avoid the problem of job Romer (1986) is that conflicts with Cycle Theory Product Life that successfully explains technological change through processes of innovation from a company patent new technology to the same company, the phase of technological temporary monopoly company, a phase of imitation of technology by other companies, technological socialization phase to the other companies and the abandonment of the technology by the innovator, who always invested in innovation to generate new technology and thus the cycle of continuous product. Romer (1986) think in an ideal world where technology is shared, that does not happen in reality, but that technology is protected by a country to maintain its technological advantage over the other, the same logic applies to a company. In this case there is a choice between putting a distortionary tax of the economy or allow the existence of technological monopoly power implies a market distorting.

In the same vein Lucas (1988) considers human capital externalities, when an individual increases its stock of human capital in turn increases the overall technique of the same individuals, shows that human capital could measure the level of technology available in a country therefore the human capital in each country will be independent of what happens in the other.

However there is no guarantee that the accumulation of human capital produces adequate employment growth in the absence exploit the knowledge and technology obtained, Lucas explains the phenomenon, but does not provide tools to leverage human capital empirically or under what conditions this leads economic growth, further work is based on Lucas neoclassical production function that was widely criticized in the debate both Cambridge and therefore applied the same criticism as the Solow (1956). When considering neoclassical theory the logical result is that growth is determined by technology, but the way this technology is achieved not explained.

Previous models used the approach of the offer, assuming compliance with Say's Law ("every supply creates its own demand"), the aggregate level that proposal was denied by Keynes (1936) to demonstrate that the 1929 crisis was over-production and demand not "adjusted" to absorb the supply, the main constraint was the lack of "effective demand", which Say's proposition is rejected and the analysis starts from the demand. As part of the criticism of these models, the work done by Thirlwall (2000) considered the engine of growth both external and domestic demand, in this essay is to use this approach to analyze the economic performance of Paraguay.

Thirlwall's Law

Thirlwall's model (2000) implies a continuity with the model of Harrod (1939) -Domar (1947), including the famous law of Thirlwall is called the dynamic Harrod multiplier, and is also a break with the neoclassical models (in particular the Solow model (1956) -Swan (1956) since it considers the demand as the main engine of the economy.

This model begins with lifting the course of a closed as from now begin our analysis incorporating the elements of foreign trade economy. Having a positive balance in the trade balance have a positive effect on the economy whenever our products are vented to the outside market, the conclusion is simple global demand for domestic products stimulates the production of a country, this is one of the elements used by Thirlwall (2000, pp. 40, 83-85) stating that "all claims (within certain limits) creates its own supply", that is, the international demand stimulates domestic production to meet the demand for domestic goods this is achieved by three characteristics of exports in the first place is the only component of the autonomous demand (not dependent on the GDP), it is the only means of attracting foreign exchange and capital that allow imports of other goods and the third factor is imports (provided by exports) induce economic growth because they can be more productive as some technological goods.

The primitive version of the model of Thirlwall (2000) relates output growth to the growth of the components of demand (investment, consumption, government spending and net exports), but as the first 3 elements are depending on the output growth relationship can condesarse expression "output growth is a function of increased exports".

From that basic idea of the model is built, the big question being asked is Thirlwall Is there any way to get a stable growth with a balanced budget in the trade balance? What is this path of expansion?

Importantly, the analysis that Thirlwall (2000) on the need for a balanced balance of the balance of payments, Clavellina (2011, pp 53-54.) There are three risks of maintaining an imbalance:

1. Risks arising from unexpected cessation of capital flows.

2. Risks of an unfair competitive advantage (which involves maintaining undervalued exchange rates and current account surplus).

3. Risks of global demand (if the world is immersed in a liquidity trap).

The balance of payments consists of the capital account and trade balance, in this model it is assumed that no capital transactions, so the trade balance and the balance of payments are equivalent.

Thirlwall The first thing is to find the balance of the trade balance (SBC), if it is in equilibrium means that exports (X) are equal to imports (F).

$$SBC = X_R - F_R = 0 \leftrightarrow X_R = F_R \tag{1}$$

$$P_d X = P_F EF \tag{2}$$

Exports (X) are valued at a price of demand (P_d), imports (F) in value are the result of the import price (P_F) and exchange rate (E). In logarithms the equilibrium expression is:

$$p_d + x = p_F + e + m \tag{3}$$

Exports (X) are given by an expression of the relative price (the price of demand abroad price, both expressed in a common currency) and income from abroad (Y_E):

$$X = \left(\frac{P_d}{EP_f}\right)^\eta Y_E^\varepsilon \leftrightarrow x = \eta(p_d - p_f - e) + \varepsilon y_E \tag{4}$$

If the terms of trade improve $\left(\frac{P_d}{EP_f}\right)$ exports are reduced because the price elasticity of exports (η) is negative, on the other hand if foreign income increases (Y_E) increase exports so that the income elasticity of exports is positive (ε).

Imports (F) are given by the income of the country (and elasticity) and the selling price abroad valued at local currency:

$$F = \left(\frac{P_f E}{P_d}\right)^\psi Y^\pi \leftrightarrow m = \psi(p_f + e - p_d) + \pi y$$

$$\pi > 0; \ \psi < 0 \tag{5}$$

The price elasticity of imports (ψ) indicate that if the price increases then imports (F) shall be made, on the other hand if it increases national income (Y) a larger volume of imports since the income demand elasticity is positive (π).

Substituting equations exports [0-4] and imports [0-5] in the equation of balance of payments [0-3] can express GDP growth based on the growth rate of exports:

$$p_d + \eta(p_d - p_f - e) + \varepsilon z$$
$$= p_F + e + \psi(p_f + e - p_d)$$
$$+ \pi y$$
$$p_d + \eta(p_d - p_f - e) + \varepsilon z$$
$$- \left(p_F + e + \psi(p_f + e - p_d)\right)$$
$$= \pi y$$
$$y = \frac{(1 + \eta + \psi)(p_d - e - p_f) + \varepsilon z}{\pi} \tag{6}$$

Equation [6] represents the GDP according to equilibrium in the balance of payments and has several implications for the growth of a:

The terms of trade (p_d-e-P_F) represent the change in the purchasing power of exports. And allow analyzes the extent that export volume allows a country to access the same volume of imported products, with reference to the same base year (Alvarez & Durán Lima, 2009, pp. 29-30). If they improve the terms of trade (Δ (p_d-e-P_F)> 0) improves the growth rate of a country when weighing the price elasticities is positive $(1 + \eta + \psi)> 0$.

Currency depreciation increases the rate of growth if the exchange situation is positive. However, the increase in the growth rate can only be temporary, unless depreciation is continuous. In subsequent periods, when the exchange rate stabilizes at its new level, the growth rate should revert to its initial level (Aravena, 2005, p. 28).

The growth rate of a country is in inverse proportion to the income elasticity of imports function.

Equation [6] is known as the weak version of Thirlwall model because it allows the variation in the terms of trade. In the final version of Thirlwall model assuming constant prices keep bringing the model reduces to the following equation applies:

$$y = \frac{\varepsilon z}{\pi} = \frac{x}{\pi}$$

(7)

Equation [7] is the strong version of Thirlwall model since the adjustment is restricted in prices, which shows that the growth of a country depends on the growth of exports if the country increased their exports will be able to raise their level of production. On the other hand, reducing the elasticity of imports is often the best alternative to ensure proper performance of the economy.

About Bernal (2011, p. 44) states that "the growth of countries occurs at different rates because in open economies is no restriction of the balance of payments, that is, low exports, thereby generating problems of unemployment and low utilization of installed capacity. "

Applications of Thirlwall law

The work of Carlos Contreras Paz (2010) aims to analyze the effect of openness to trade, analyze the case of Peru, in his empirical analysis makes a modified estimate of Thirlwall's Law using the generalized least squares method, the Main conclusions of its analysis relating to the terms of trade, to maintain the same growth rate to an increase in the marginal propensity to import is necessary that the rate of export increase, also to the drop in the rate of growth exports need to be adjusted downward marginal propensity. Also makes a cointegration test Johansson and the result was that the number of output growth is related to the export growth, this translates into a stable long-term relationship.

His analysis of the terms of trade of a situation with import substitution model (1960-1989) to a situation with economic liberalization (1990-2010), the evidence shows that trade liberalization resulted in a decreased rate growth of exports and an increase in the marginal propensity to import. Thirlwall's model predicts that the growth rate should decrease but in reality this increased 3.09% (on average during the import substitution model) to 4.62% (for the adoption of the neoliberal model).

A priori Thirlwall's Law is not met, but consider that in this model a balanced trade balance is assumed, Contreras (2010) justifies this apparent inconsistency by showing that during the period analyzed Peru has incurred current account deficit, this means that the economic growth achieved is unstable, the evidence in that sense alone is sufficient to determine that the growth of Peru is unstable, but does not reject the law of Thirlwall since the cointegration test shows the ratio of long-term variables .

Aravena's work (2005) to analyze the performance of Thirlwall's Law for Argentina and Chile, the method used was to build cointegrating vectors (specifically VEC's) of exports and imports using quarterly data from 1996 to 2004. analysis looking for the integration order of the series, for the series in first differences the test DFA rejects the existence of unit roots and KPSS test cannot reject stationarity in the series of each country, so it is assumed start the integration order is I (1). The Johanssen cointegration test suggests that there is one cointegrating vector in each variable studied to 5% of significance. According to the analysis Argentina with high income elasticity imports (3.62) and not very high growth rate of exports in the long term only get growth rates not much above 2%. Unlike Chile, under the same analysis would achieve rates of 6% since its low income elasticity of imports (86). The author concludes that Argentina despite being less open to the world that Chile is more vulnerable to external shocks.

The work of Bismarck and Risso (2007) on Bolivia used as various regression estimation technique, at first used a simple model of GDP depending on exports, then the model would be extended allowing the incorporation of the real exchange rate.

Subsequently imports and exports as it is presented in the first section of this work would model. From these results Cointegration technique was applied, the results show the existence of a cointegrating vector in all periods. This yields a necessary to defend the validity of Thirlwall's Law for the Bolivian economy condition. The effect of the real exchange rate, which would be crucial to understanding the long-term growth of the Bolivian economy, was analyzed because it has been an important variable in the stabilization policies. It was noted that this had a negative effect on output growth in the long term. On the other side it would have zero effect on the trade balance which would agree with the assumption of the model of Thirlwall.

A curious result is that the Bolivian domestic product has a negative effect on the trade balance. By estimating the export and import function is able to obtain both. First imports are more elastic than exports to GDP, an increase of Bolivian GDP grew well above imports than exports grew resulting in a negative effect on the trade balance. If we compare the two paths periods we see that the income elasticity of imports is increased in a major way during the period 1953-1985 and 1985-2002 from 2.64 to 11.23 respectively. In the case of exports, the results show a export income elasticity of 1.69 for the entire period.

Featuring a variation for the periods 1953-1985 and 1985-2002, going from 1.61 to 2.26 correspondingly. Secondly it can be seen that the income elasticities of imports and exports are closely related with the growth ratio between domestic revenue and the rest of the world, verifying the model of Thirlwall course.

An estimate of Thirlwall's Law for the case of Uruguay was made by Alvarez and Falkin (2008), the first step of your job is to build sets for estimating the income of the rest of the world (the weighted sum of the main trade partners of Uruguay They associated with their participation in the Uruguayan trade) and real exchange rate (calculated multilaterally) that as imports and Uruguayan exports have an order and integration I (1), the equations of imports and exports were estimated exactly as They were made by Thirlwall (2000). In the case of imports income and price elasticities were 2.69 and -0.21 respectively. These results are consistent with the theory in both signs and values being significant price elasticity to 5% and significant revenue elasticity for any reasonable level of significance. The model R^2 was 0.64. To calculate the income elasticity of imports estimates are made by courts (1939-1968, 1940-1969, ..., 1977-2006), from 1939 to 1988, the income elasticity of imports is increasing, from 1989 to 2006 is stable estimation . In the case of exports the model R^2 was 0.71 and the leading coefficient (28.91) between exports and global income it was significant. With the above come to calculate the growth rate is 52% for the Uruguayan economy and the authors conclude that there exists an external constraint to the growth of the Uruguayan economy.

An analysis is performed by Nicaragua Saballos (2009) during the period from 1937 to 2008, the author begins by testing stationarity in all statistical series by DFA, we proceeded to perform Granger causality contrast showing that GDP and type Granger real change are grounds for imports, the same result as in exports. Applying the cointegration Johanssen is obtained that there is one cointegrating vector and the series are related in the long run.

To estimate the model import function is a function of the extent of price competitiveness considering the real exchange rate, as measured by household income Nicaragua's Gross Domestic Product and the terms of trade variables as exogenous variable. Exports are considered a function of gross domestic product in the US, the real exchange rate, the terms of trade and a dummy variable adjustment for the years CACM. The annual average growth of the Nicaraguan economy was 2.95% which was lower compared to that obtained decrease growth rate model constrained by the balance of payments (3.98%), this figure is obtained by multiplying the average annual rate of economic growth in the United States for the same period (3.40%) by the ratio of income elasticities of export demand function (1.732778) and import (1.476653) of the Nicaraguan economy.

Bastourre, Casanova and Spore (2011) analyze the relationship between exchange rates and economic growth, this research is important because broadcast channels analyzed, of particular interest is the effect on trade and diversification of exports that are just relevant bridges Thirlwall's Law. The results of his research involving a currency undervaluation increases economic growth because it makes goods more competitive a country, its sample found that the effect is not of the same magnitude in all countries but depends on structural factors, regions have benefited from an undervalued exchange are South Asia and North Africa region where the currency undervalued growth explains 73% and 25% for developed with strong currencies such as Europe and Central Asia economies power its currency depressed growth in 12%.

The panel data model presented by the authors for 125 countries shows a positive relationship between undervaluation and exports as a share of GDP.

The authors conclude that the competitive exchange indeed have a positive impact on exports. However, the low value of the elasticity found suggests that the increase of exports which can be induced by devaluation is limited and therefore seems insufficient as the sole explanatory element of the relationship between real exchange rate and growth.

Alonso & Garcimartín (1999) analyze Thirlwall's Law in an attempt to show that it is consistent with the results of convergence. The sample used by the authors are the OECD countries, convergence is defined as the decrease over time of the dispersion of per capita income and the growth rate of a country is negatively related to income level, the convergence parameter is significant (-.199 with a value of 4.8 t), the convergence time would take 50 years. To test Thirlwall's Law equation arises exports, relative prices have been built as the ratio of export prices relative to XP weighted price index of the countries competing with the Spanish sales (P *), while foreign income (Y *) refers to the weighted income OECD countries, in both cases using as weights the weight of each country in the Spanish exports. Regarding the import equation, relative prices are defined as the ratio of import prices (MP) to domestic prices (P). The regressions are all explanatory parameters, but low R ^ 2 of .52 and .58 in exports for imports equation, Thirlwall's Law is checked to establish that the series are cointegrated 95% according to the test Johanssen .

Frias Diaz and Iglesias (2012) perform a test for the Eurozone, although the estimate of Thirlwall's law only made to Spain, during the period 2000-2007, first they found growth rates of imports and exports by Country: Germany, Austria and Portugal were the only economies where sales abroad grew further purchases abroad.

To explain the situation of countries in international trade Harmonised Competitiveness Index and the Grubel-Lloyd index, according to the analysis United Kingdom, France, Germany, Austria, Holland and Belgium recourse countries had a higher proportion were intra-industry trade and Greece and Portugal were the countries where inter-industry trade was more important. The application of Thirlwall's Law was through the mechanism of cointegration Johanssen, the series were I (1) so the estimate was made in first differences, the price elasticity of Spanish imports is high (-2.8) and although smaller, is also important the income elasticity (0.75), with respect to the results obtained for exports, the income elasticity estimated is very high (3.2) and there is a negative effect derived from the prices (- 2.8). The authors conclude that "exports of all the States of the EU have shown a strong performance, despite weak growth in the core countries of the Eurosystem and the deterioration in the nominal competitiveness of the economies of the South."

Tadeu Rocha (2013) conducted an empirical evaluation of Thirlwall's law modified to consider multiple sectors through analysis of panel data for 90 countries in the period 1965-1999. For the overall sample 11 economic sectors (oil, primary inputs, forest products, tropical agriculture, animal products, cereals, labor, capital, machinery, chemical industry and others) for both exports and imports were considered to be obtained elasticities income is positive. Applying Thirlwall's Law in a non-parametric analysis of growth rates for each country in the sample are obtained. For Mexico the model predicts a growth of 2.38%, when the observed value was 1.88% in the analysis period.

Carton and Slim (2014) conducted an analysis of economic growth and the balance of payments for the period 1982-2012, its empirical application is to test Thirlwall's law and expanded the original version made by Nell (2003) where it is considered exchange blocs. The existence of multilateral trade requires a weighted multilateral GDP estimate, the relative proportions of imports and exports of each country by its GDP used in this sense the authors' analysis is among Mexico, Europe (Germany, Spain and the UK) , North America (Canada and USA), Asia (Japan, China and India) and Latin America (Brazil, Colombia, Chile and Venezuela). To test the long-term relationship between economic growth and external demand cointegration methodology ARDL (autoregressive distributed lag model) to test levels, in a second step using the error correction model is not restricted performed to analyze Short-term relationship, this analysis is not possible using the t statistic, use the Joint F-statistic that is more demanding. For Mexico, the authors find that in the long term growth in North America and Asia have a positive impact and restrict the growth of the country and an increase of 1% of GDP in the Asian region $((\varepsilon/\pi)\_Asia \wedge LP = 0.41$; t-ratio $= 3.21)$ or North American $((\varepsilon/\pi)\_AN LP \wedge = 0.53$; t-ratio $= 4.67)$ induce growth of 0.53 and 0.41%, in the case of Latin America $((\varepsilon/\pi)\_Al LP \wedge = .45$; t-ratio $= 2.02)$ and Europe $((\varepsilon/\pi) LP \_E \wedge = .13$; t-ratio $= 1.16)$ growth is not significant for development from the country. In the short-term analysis it shows that North America $((\varepsilon/\pi)\_AN \wedge CP = .59$; t-ratio $= 3.35)$ is again the region with the greatest respect, the role of Asia in the short term is reduced widely $((\varepsilon/\pi)\_Asia \wedge CP = .18$; t-ratio $= 1.27)$, Europe has a more important role $((\varepsilon/\pi)\_E \wedge CP = .77$; t-ratio $= 2.55)$ and relationship Latin American block $((\varepsilon/\pi)\_LN \wedge CP = .074$; t-ratio $= 0.28)$ is still not significant, the correction coefficient mistake behind shows rapid adjustment (ECM_ (t-1) CP $\wedge$ = - 68;. ratio-t = -4.59).

With this analysis, the authors finally find that the growth rate according to the balance of the balance of payments is 4.03% when observed was 3.58% in the analysis period.

Economic growth and external constraints in Paraguay

GDP growth of Paraguay has a positive trend as seen in Figure 1, stands the fact that in the first quarter of 1994 the GDP was 3 283 343 000 Gs and the second quarter of 2015 GDP amounted to 33 747 641 000 Gs representing GDP grew 9.2 times in 21 years.

However, growth has been relatively unstable, the quarterly growth rates contained in Figure 2 shows that growth is more erratic and variable-sharp and linear.
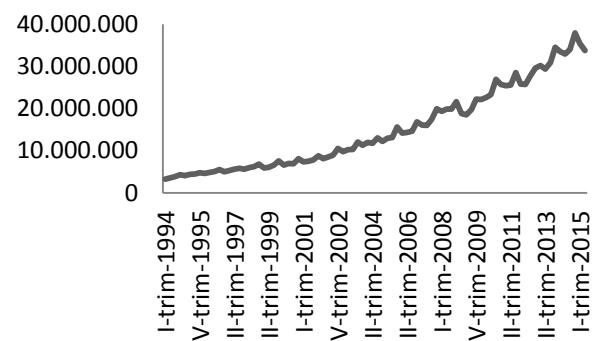
Graphic 1 Paraguay's gross domestic product at constant prices, 1994-2015
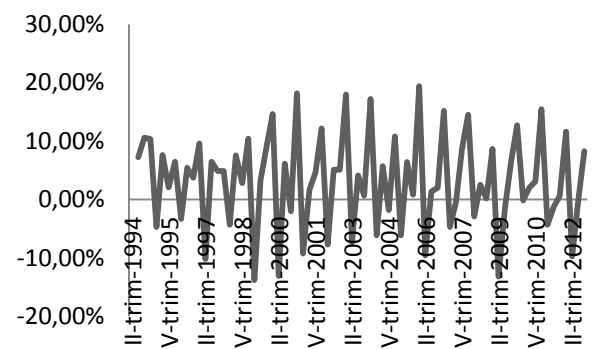
Graphic 2 Quarterly growth rate of GDP of Paraguay, 1994-2012

Empirical law enforcement Thirlwall

The application of Thirlwall's Law is done by estimating export functions [0-3] and imports [0-4] for the income elasticities of imports and exports that are required to estimate the GDP according to the balance of payments displayed in the [0-7] function.

Verifying Thirlwall's Law is done through three alternative methods, the first is to estimate export and import independently considering as exogenous variable GDP of Brazil which is the main trading partner of Paraguay, the method to be used is Least Squares Ordinary (MCO) which ensures minimization of model errors.

The second method is to incorporate the GDP estimate for Argentina and Mexico in the functions of exports and imports and re-estimate equations via MCO.

The third method is deeper and involves determining whether there is causality and a long-term relationship between exports and GDP, this ratio is important because Thirlwall's law is based on this relationship is significant and stable in the long run. The Granger causality test, cointegration test Johanssen and Vector Autoregressive to explain the growth in Paraguay were used.

Method 1 function estimation of exports and imports

The estimate function performed considering exports to Brazil's GDP as exogenous variable, as already noted the estimate shall be effected in logs and considering that the terms of trade are constant.

Dependent Variable: LOG(X)				
Method: Least Squares				
Date: 11/27/15 Time: 10:46				
Sample: 1994Q1 2012Q3				
Included observations: 75				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(YBRASIL)	3.525133	0.075185	46.88597	0.0000
C	-27.96437	0.927746	-30.14225	0.0000
R-squared	0.967860	Mean dependent var		15.52960
Adjusted R-squared	0.967419	S.D. dependent var		0.627770
S.E. of regression	0.113313	Akaike info criterion		-1.491020
Sum squared resid	0.937309	Schwarz criterion		-1.429220
Log likelihood	57.91324	Hannan-Quinn criter.		-1.466344
F-statistic	2198.294	Durbin-Watson stat		0.993731
Prob(F-statistic)	0.000000			

Table 1 Estimated export function

Exports are an increasing function of Brazil's GDP, which was expected to be the main trading partner of Paraguay, in a study by the Latin American Integration Association (ALADI-SEC, 2013) states that trade with Brazil has had a surplus explained by large exports of electricity. The model has a higher coefficient of determination ($R\,2 = .96$) than the estimate reveals that explains 96% of changes in exports, both the t test and the F test allow us to note that the relationship is found Explanatory 99% confidence.

The income elasticity of exports indicates that if Brazil's GDP increased by 1% then Paraguay exports should grow by 3.5% this because the Brazilian economy more dynamic population may have higher incomes to consume products imported from Paraguay and as energy consumption could be higher. As the value of elasticity is greater than one, it is said that exports are elastic external entry, in this case, the level of production of Brazil.

In the case of the import function is estimated using GDP as an argument Paraguay, the idea is that the higher the national income to import larger volumes of goods.

Dependent Variable: LOG(F)				
Method: Least Squares				
Date: 11/27/15 Time: 14:37				
Sample: 1994Q1 2012Q3				
Included observations: 75				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(YPARAGUAY)	0.990733	0.030537	32.44398	0.0000
C	-0.633831	0.493707	-1.283820	0.2033
R-squared	0.935146	Mean dependent var		15.37241
Adjusted R-squared	0.934258	S.D. dependent var		0.634101
S.E. of regression	0.162585	Akaike info criterion		-0.768928
Sum squared resid	1.929672	Schwarz criterion		-0.707128
Log likelihood	30.83479	Hannan-Quinn criter.		-0.744252
F-statistic	1052.612	Durbin-Watson stat		0.321857
Prob(F-statistic)	0.000000			

Table 2 Estimated exports function

The function of the estimate of imports accounts for 93% of the variations in endogenous, by the F-test and t-test is accepted that the explanatory variable is used. The income elasticity of imports is positive and close to 1, which characterizes a function and allow unit elasticity indicate that if the GDP increases by 1% Paraguay then imports would increase one .99%.

Substituting the obtained income elasticities and export growth in the equation [0-7] is possible to obtain the estimate of GDP growth for each period, as noted this growth rate is the one that satisfies equilibrium in the balance payment.
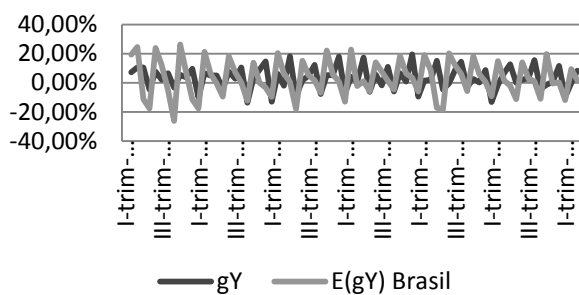
Graphic 3 Growth in Paraguay: Estimation Method 1 vs Observed

The estimate using the first method is inaccurate and also the correlation coefficient between the two series is .33 seen in Figure 3.

Method 2: Estimation of the role of exports Mexico, Argentina and Brazil

This method 2 tries to improve the estimation method 1 inserting in the equation of exports to other trading partners, thereby reformulated and inserted estimating the GDP of Mexico and Argentina as regressors.

Dependent Variable: LOG(X)				
Method: Least Squares				
Date: 11/26/15 Time: 11:30				
Sample: 1994Q1 2012Q3				
Included observations: 75				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(YBRASIL)	3.433086	0.251544	13.64808	0.0000
LOG(YARGENTINA)	-0.276048	0.127337	-2.167846	0.0335
LOG(YMEXICO)	0.514972	0.259517	1.984348	0.0511
C	-31.66724	1.959499	-16.16089	0.0000
R-squared	0.971287	Mean dependent var		15.52960
Adjusted R-squared	0.970074	S.D. dependent var		0.627770
S.E. of regression	0.108599	Akaike info criterion		-1.550456
Sum squared resid	0.837351	Schwarz criterion		-1.426856
Log likelihood	62.14209	Hannan-Quinn criter.		-1.501104
F-statistic	800.5907	Durbin-Watson stat		0.992226
Prob(F-statistic)	0.000000			

Table 3 Estimated exports expanded function

The results in Table 3 confirm the positive relationship between exports of Paraguay and dynamism in the Brazilian economy, in addition to Mexico one income elasticity of 0.51 was obtained far below Brazil obtained with 3.43, which reveals the weight each economy on exports. Argentina's case is complicated given that theoretically a positive relationship to be an important trading partner would be expected.

The model explains 97% of changes in exports, all explanatory variables are the 90% confidence and F test will reject the hypothesis that estimated coefficients are simultaneously different from zero.

The estimated growth rate is performed again by replacing the elasticities in equation [0-7] together with GDP growth rates of Argentina, Brazil and Mexico.

Graphic 4 shows the estimates for the forecast period and the rates of growth have a correlation coefficient of 0.38, higher than the model where only considered Brazil's GDP.
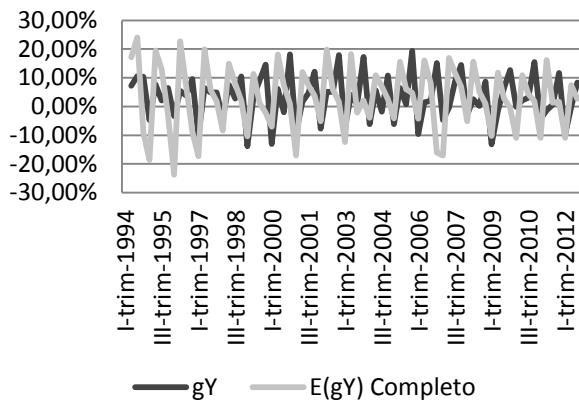
Graphic 4 Growth in Paraguay: Estimation Method 2 vs Observed

Method 3: estimate by a VAR

The third method is based on the causal relationship between exports and imports, for which the Granger causality test was evaluated, the results in Table 4 CONDESAN.

Pairwise Granger Causality Tests			
Date: 11/27/15 Time: 10:57			
Sample: 1994Q1 2012Q3			
Lags: 2			
Null Hypothesis:	Obs	F-Statistic	Prob.
YPARAGUAY does not Granger Cause X	73	6.43719	0.0028
X does not Granger Cause YPARAGUAY		19.6455	2.E-07

Table 4 Granger causality test between exports and GDP of Paraguay

The test provides two scenarios, the first is that the GDP of Paraguay is not Granger-causal exports and the second is that exports did not cause GDP. Both hypotheses are rejected at the 99% confidence level, so that exports if satisfactorily explain GDP.

The next step is to evaluate the relationship between GDP and exports are cointegrated and therefore having a long-term stable relationship, this can be contrasted with the test Johanssen, this step is important to have a support that gives certainty that the obtained relationship is not spurious.

Johanssen test are presented in Table 5, it can reject the hypothesis that there is no cointegrating vector and cannot reject the hypothesis that there is at least one cointegrating equation. Therefore it is concluded that there is a stable and long term relationship between GDP and exports relationship.

Date: 11/26/15 Time: 15:33			
Sample (adjusted): 1994Q3 2012Q3			
Included observations: 73 after adjustments			
Trend assumption: Linear deterministic trend			
Series: YPARAGUAY X			
Lags interval (in first differences): 1 to 1			
Unrestricted Cointegration Rank Test (Trace)			
Hypothesized		Trace	0.05
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.263792	24.37309	15.49471	0.0018
At most 1	0.027258	2.017425	3.841466	0.1555
Trace test indicates 1 cointegrating eqn(s) at the 0.05 level			
* denotes rejection of the hypothesis at the 0.05 level			
**MacKinnon-Haug-Michelis (1999) p-values			
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)			
Hypothesized		Max-Eigen	0.05
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.263792	22.35567	14.26460	0.0021
At most 1	0.027258	2.017425	3.841466	0.1555
Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level			
* denotes rejection of the hypothesis at the 0.05 level			
**MacKinnon-Haug-Michelis (1999) p-values			

Table 5 Granger Causality Test between exports and GDP of Paraguay

The Granger causality test to ensure causality (a feed-back effect) between GDP and exports, while the cointegration test Johanssen infer a stable long-term relationship with these inputs is possible to build a Autoregreivo Vector (VAR) the results of this estimation are concentrated in Table 6.

Vector Autoregression Estimates		
Date: 11/26/15 Time: 15:34		
Sample (adjusted): 1994Q2 2012Q3		
Included observations: 74 after adjustments		
Standard errors in ( ) & t-statistics in [ ]		
	YPARAGUAY	X
YPARAGUAY(-1)	0.455082	0.062377
	(0.08644)	(0.05246)
	[5.26475]	[1.18911]
X(-1)	1.036004	0.894264
	(0.15957)	(0.09684)
	[6.49248]	[9.23472]
C	180311.9	102736.2
	(205185.)	(124519.)
	[0.87878]	[0.82506]
R-squared	0.985768	0.982037
Adj. R-squared	0.985367	0.981531
Sum sq. resids	5.64E+13	2.08E+13
S.E. equation	891157.9	540811.9
F-statistic	2458.915	1940.803
Log likelihood	-1117.291	-1080.331
Akaike AIC	30.27813	29.27923
Schwarz SC	30.37153	29.37263
Mean dependent	12584859	6761206.
S.D. dependent	7367032.	3979482.
Determinant resid covariance (dof adj.)		2.18E+23
Determinant resid covariance		2.00E+23
Log likelihood		-2195.229
Akaike information criterion		59.49268
Schwarz criterion		59.67950

Table 6 Estimation of VAR

The value of VAR coefficients has a theoretical explanation, however represent the level of correction of deviations in each period, in the case of equation GDP GDP coefficient is behind a period of 45 whereby the 45% of the errors are corrected in a period.

The estimate of GDP (and Thirlwall's Law) is strong to make projections with a determination coefficient of 0.98 (the model explains 97% of changes in GDP). With this model and thus GDP growth rates expected was calculated. The observed and expected rates of growth are shown in Figure 5. The correlation coefficient between the two series is 95%, which represents a proper fit between the estimate and the actual value.
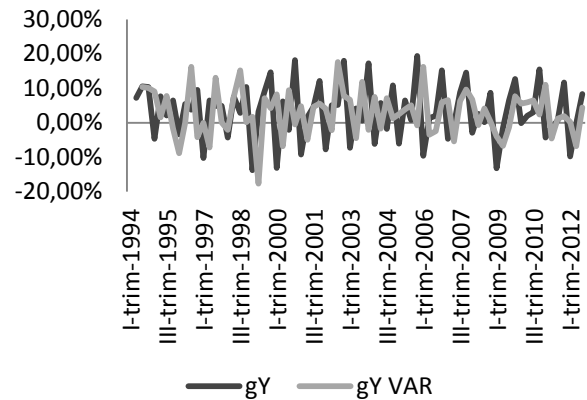
Graphic 5 Growth in Paraguay: Estimation Method 3 (VAR) vs Observed

Existence of the restriction

So far, various schemes have been used to estimate the growth potential according to the balance of payments rate. The average quarterly growth rate of Paraguay from 1994-2012 is 3.23% per quarter, the estimate of the potential growth rate with balance of payments according to Method 1 is 2.96% and according to method 2 is 2.91% the estimated model 3 rate is 2.95% but the correlation with actual growth is the highest of the various estimates.

Quarterly growth rate:	GDP	exports	Estimation Method 1	Estimation Method 2	Estimation Method 3
	gY	gX	E (Gy) Brazil	E (Gy) Full	VAR gY
Average quarterly rate	3.23%	3.20%	2.96%	2.91%	2.95%
Correlation with gY	1.00	0.12	0.33	0.38	0.91

Table 7 Estimation results

The quarterly growth rate in Paraguay is high compared to those in Mexico (67%), Brazil (83%) and Argentina (1.19%), this would conclude that there is no external constraint to growth in Paraguay.

The difference between actual growth and the observed can be explained by various causes, Thirlwall (2000) points 3:

(i) Persistent surplus in trade balance; (ii) the estimated value of the price elasticity of imports used in the estimate may be lower than their true value and (iii) adverse changes in prices and elasticities.

In the case of Paraguay's surplus in the trade balance it has been held since 1987 and a positive trend in the surplus is presented as shown in figure 6.
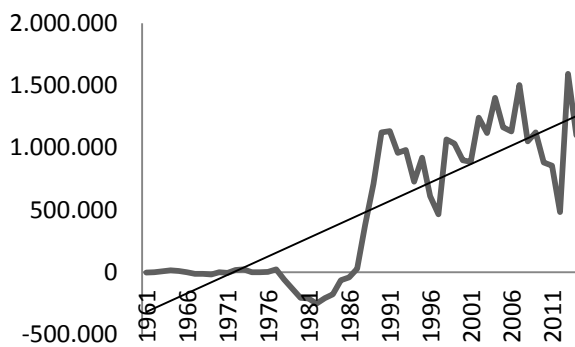
Graphic 6 Balance of Trade Balance of Paraguay, 1961-2014

Concluding Remarks

This work has exposed the major theories that address economic growth and triggers in the first section highlighted the contrast between the current Keynesian (which considers that the growth is unstable nature, does not accept functions production aggregated and their focus is on the demand), the neoclassical (considering convergence between countries, the stability of the balance, the existence of a steady state and its emphasis is on the supply side) and the flow of endogenous growth (which considers that there may be constant returns, incorporating innovation, technological change and human capital) .For the above, it is considered that economic growth is multifactorial and depends on so many different aspects such as physical capital, labor, technology, human capital, savings and innovation.

In the modern theory of economic growth is assumed that the main supply is limited from the current level of technology, the main theoretical contribution of the model is analyzed to establish that there is also a demand restraint from this point follows Thirlwall John M. Keynes considering that the demand cannot absorb an unlimited supply of goods but demand (effective) acts as limiting supply.

Thirlwall's law is in the post-Keynesian spectrum, considered essential growth factors income and price elasticities of exports and imports, which together with the terms of trade, determines a level of growth that satisfies the balance the balance of the balance of payments. Thirlwall's Law contrasts with other models openly state that autarky is untenable, in that sense it is a continuation of the theory of David Ricardo on international trade as a mechanism to expand the production-possibility frontier and avoid economic stagnation, having results in interdependence with the outside (measured by global income) as is the current globalizing world.

The medium of interaction with the outside is through exports which are the only autonomous component of demand to be independent of the level of production, additionally are the only way to attract foreign currency and resources to enhance productive capacity, and it is also a mechanism to finance imports that can be used as intermediate inputs to enhance production levels.

The first estimation method consists of estimating equations imports and exports independently and get the price and income elasticities. Estimates of the strong version of Thirlwall's Law were made with coefficients greater than .95 determination, with the significant variables to 95% and an F test that allows to reject the hypothesis that the coefficients are simultaneously zero.

In the estimation method 1 A 3.52 income elasticity for exports and imports obtained an income elasticity of 0.99 was obtained. These income elasticities left in Paraguay found that demand fewer imports in terms of income that demand for Paraguayan exports depending on the income of Brazil.

The second model that incorporates Mexico and Argentina as plaintiffs of Paraguayan exports no big differences since Brazil remains the most important factor with an income elasticity of 3.43, elasticity with Mexico's GDP amounted to 0.5 and in the case of Argentina the opposite sign to economic theory was observed. The opposite sign can be caused by the dominant role of Brazil.

To apply the VAR technique is required to prove that the series are Granger-causal, not causal hypothesis is rejected in the sense of Granger 99% confidence and a feed-back effect was evident. Johanssen in the test found that there was a single cointegrating vector and the ratio of exports to GDP is stable in the long run.

The application of the VAR model with a lag had significant coefficients and represents the best fit, given that the growth estimate and the observed value had a correlation of .91.

The estimates are close in value (2.96%, 2.91% and 2.95%) but differ from the actual observed value (3.23%), which can be explained by a persistent surplus in the trade balance.

An external constraint is no evidence that the growth of Paraguay is higher than that observed in their partners.

Statistical Annex

	Paraguay GDP	PBI Argentina	Brazil GDP	Mexico GDP	Exports	Imports
	Million Guarani	Million pesos	Million reais	Millions of pesos MXN	Million Guarani	Million Guarani
	Y Paraguay	Y Argentina	Y Brazil	Y Mexico	X	F
I-trim-1994	3,283,343	232,945	168,720	8,301,870	1,916,710	1,868,566
II-trim-1994	3,520,305	257,477	177,856	8,505,143	2,177,646	2,171,793
III-trim-1994	3,892,545	253,468	190,123	8,453,306	2,406,226	2,458,824
IV-trim-1994	4,296,139	257,342	184,116	8,809,228	2,617,807	2,834,889
I-trim-1995	4,093,862	237,968	174,969	8,210,632	2,779,139	2,504,237
II-trim-1995	4,406,621	248,094	186,669	7,817,381	3,012,960	2,657,354
III-trim-1995	4,498,215	242,215	193,118	7,867,116	2,884,330	2,542,446
IV-trim-1995	4,790,447	244,468	190,390	8,212,461	2,312,820	2,309,304
I-trim-1996	4,630,924	236,566	176,365	8,345,328	2,386,832	2,128,677
II-trim-1996	4,883,233	260,752	189,394	8,341,360	3,019,469	2,644,411
III-trim-1996	5,066,718	262,167	192,974	8,408,905	2,712,403	2,648,130
IV-trim-1996	5,551,987	267,020	186,676	8,898,243	2,499,469	2,704,558
I-trim-1997	4,985,743	256,388	177,366	8,708,280	2,382,443	2,414,524
II-trim-1997	5,309,023	281,770	187,931	9,050,661	2,861,896	2,604,217
III-trim-1997	5,568,149	284,092	191,121	9,075,963	2,752,316	2,591,405
IV-trim-1997	5,839,951	287,515	190,885	9,525,885	2,522,671	2,691,016

I-trim-1998	5,588,720	271,702	185,758	9,422,001	3,030,635	2,609,168
II-trim-1998	6,011,428	301,208	195,284	9,452,294	3,704,217	3,068,427
III-trim-1998	6,180,825	293,315	199,190	9,486,798	3,642,795	3,021,567
IV-trim-1998	6,824,421	286,268	199,251	9,709,323	3,471,163	3,212,235
I-trim-1999	5,883,925	265,025	192,298	9,634,883	2,713,903	2,139,207
II-trim-1999	6,075,565	286,412	199,800	9,651,310	3,017,190	2,447,849
III-trim-1999	6,624,231	278,473	199,746	9,750,116	3,023,016	2,513,932
IV-trim-1999	7,593,229	283,566	197,374	10,049,450	3,097,624	2,558,674
I-trim-2000	6,598,841	264,556	192,484	10,158,428	3,084,724	2,322,019
II-trim-2000	7,004,539	285,275	203,556	10,241,666	3,490,466	2,718,558
III-trim-2000	6,861,788	276,768	207,179	10,313,099	3,517,016	2,975,130
IV-trim-2000	8,108,932	278,092	207,490	10,442,733	3,291,877	2,912,524
I-trim-2001	7,360,409	259,200	196,983	10,166,159	3,273,974	2,564,135
II-trim-2001	7,483,998	284,796	205,340	10,184,475	3,526,523	2,713,380
III-trim-2001	7,832,082	263,127	208,372	10,205,864	3,759,764	2,979,787
IV-trim-2001	8,785,589	248,865	209,310	10,350,232	3,643,464	2,941,103
I-trim-2002	8,108,147	216,849	205,301	9,937,764	3,775,234	2,771,757
II-trim-2002	8,521,364	246,315	218,064	10,330,184	4,918,631	3,320,608
III-trim-2002	8,958,805	237,417	221,459	10,258,405	5,415,646	3,561,888
IV-trim-2002	10,567,897	240,361	222,022	10,454,340	5,341,925	3,484,035
I-trim-2003	9,801,820	228,596	213,848	10,254,249	5,218,489	3,679,472
II-trim-2003	10,206,569	265,402	227,507	10,371,677	6,188,112	4,279,696
III-trim-2003	10,272,602	261,535	226,116	10,279,756	5,935,835	4,556,599
IV-trim-2003	12,043,228	268,561	226,765	10,637,747	5,952,151	4,338,499
I-trim-2004	11,304,129	254,330	223,113	10,684,434	6,082,456	4,266,377
II-trim-2004	11,949,911	284,376	231,898	10,799,663	6,600,364	4,530,020
III-trim-2004	11,738,623	284,392	236,857	10,703,782	6,845,774	5,319,528
IV-trim-2004	13,006,380	295,467	237,754	11,140,137	6,588,651	5,646,745
I-trim-2005	12,212,664	274,595	234,631	10,842,331	7,420,886	5,314,666
II-trim-2005	12,999,004	313,927	246,798	11,179,667	7,737,535	5,866,553
III-trim-2005	13,105,043	310,593	251,203	11,067,923	7,584,548	6,425,984
IV-trim-2005	15,645,616	319,939	253,616	11,552,049	8,664,592	7,218,078
I-trim-2006	14,150,400	298,696	249,396	11,469,030	8,770,646	6,829,616
II-trim-2006	14,345,911	338,244	262,730	11,725,051	8,307,344	7,008,000
III-trim-2006	14,658,091	337,742	269,077	11,665,657	9,054,554	7,556,049
IV-trim-2006	16,859,104	347,579	256,051	12,014,949	9,102,449	8,029,579
I-trim-2007	16,070,028	322,449	242,630	11,804,324	8,540,366	6,814,543
II-trim-2007	16,004,089	367,492	256,425	12,047,218	9,556,682	7,574,885
III-trim-2007	17,412,701	367,539	265,129	12,033,956	10,557,144	8,824,600
IV-trim-2007	19,939,444	379,200	269,650	12,464,910	10,693,555	9,307,157
I-trim-2008	19,365,811	349,945	265,301	12,057,842	10,814,260	9,406,383

II-trim-2008	19,860,321	396,227	278,901	12,418,358	11,407,808	10,022,441
III-trim-2008	19,891,902	393,039	283,488	12,225,310	11,466,283	11,043,786
IV-trim-2008	21,616,720	394,565	284,029	12,325,944	9,916,061	9,520,293
I-trim-2009	18,766,658	357,096	276,536	11,427,213	9,859,231	8,137,810
II-trim-2009	18,488,396	393,181	288,148	11,432,364	9,740,640	7,896,569
III-trim-2009	19,680,497	391,679	289,507	11,666,112	10,601,097	8,962,764
IV-trim-2009	22,181,639	404,361	287,910	12,197,308	10,576,141	10,415,271
I-trim-2010	22,146,575	381,222	278,741	11,849,859	11,798,810	10,171,440
II-trim-2010	22,601,864	439,767	289,735	12,205,118	12,999,945	11,542,728
III-trim-2010	23,293,329	425,323	292,246	12,300,747	13,244,563	12,613,061
IV-trim-2010	26,892,487	442,209	293,154	12,756,911	14,265,985	14,551,231
I-trim-2011	25,733,547	419,023	284,013	12,377,242	13,581,848	12,324,227
II-trim-2011	25,393,654	479,964	299,756	12,597,463	14,037,224	13,132,443
III-trim-2011	25,552,744	464,883	299,338	12,813,924	14,449,707	13,558,254
IV-trim-2011	28,523,269	474,415	299,534	13,308,342	15,200,346	13,888,645
I-trim-2012	25,743,792	440,884	289,461	12,982,273	12,654,788	12,041,117
II-trim-2012	25,697,180	479,966	297,156	13,164,150	13,736,529	13,054,065
III-trim-2012	27,832,266	488,141	298,617	13,222,137	14,506,896	13,488,347
IV-trim-2012	29,559,022	484,213		13,763,649	13,432,467	14,425,308
I-trim-2013	30,182,442	454,315		13,064,767	14,822,477	12,773,349
II-trim-2013	29,331,322	519,609		13,374,408	16,457,237	14,270,915
III-trim-2013	30,835,779	494,042		13,406,776	16,007,963	14,471,331
IV-trim-2013	34,508,513			13,854,994	14,361,213	14,275,399
I-trim-2014	33,523,253			13,310,049	16,310,230	13,670,194
II-trim-2014	32,894,546			13,583,626	17,105,740	14,390,424
III-trim-2014	33,953,045				14,975,178	14,736,240
IV-trim-2014	37,889,041				14,082,019	14,990,573
I-trim-2015	35,393,595				15,714,964	13,450,041
II-trim-2015	33,747,641				13,298,002	12,172,400

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ISSN-On line: 2414-4827
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TUN-GONZALES, Adrián. Economic growth and external constraints: Evidence of Thirlwall's Law for Paraguay 1994-2012. ECORFAN Journal-Republic of Paraguay 2015

Article

Public policy and its relationship with local economic development

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Abstract

This research aims to make a theoretical and conceptual review as a starting point for the study of elements and mechanisms for evaluation of public policies on economic development, considering the intrinsic elements to achieve a regional and local development. At the beginning of the role of government and the participation of major political, social and economic in the process of planning, decision making, study and implementation of public actions aimed at comprehensive development actors.

Public policy, economy, relationships

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Introduction

Daily, referring to public policy is assumed to be those of the unilateral decisions taken by governments. However, above the simplicity of the idea, we must consider that the period of these decisions are shaped by fundamental cycles that start from the consideration of public issues and their prioritization within the government's agenda to translate in the study, making, implementation, analysis and evaluation of public policies.

This process integrates a complex decision-making process in which they must build several scenarios that integrate the political, economic and social government spectrum; ie the set of all these variants should converge on a balanced set of goals, objectives and lines of government action, in which possible solutions to certain public issues will be channeled and head to an efficient public management, translate their functions into concrete actions to improve the quality of life of the population.

Public policies and economic development

Historically, economic development has revolved around structured theories, proven experience and the interrelationship between the factors of production, capital and marketing that interact in global, regional, national and local levels, adding to this spectrum of government action or government affairs through government programs. The latter objectives and instruments that embody them emerge, refers to: public policy, a subject on which will focus this chapter.

For purposes of defining terms of public policies, government decisions understood as applied to the public sphere that the effect of the interaction between the actors in a state influences the private sector.

Refer to the public sphere comes the responsibility of the hierarchy of collective problems, with the understanding that the State through its organs of government and public administration has made a rigorous process in the study of public problems and has taken intrinsic responsibility of government decisions and actions to address them.

The decision involves some controversy regarding prioritization and prioritization of the issues on which it decides "do, stop doing or do" about Dye (2002: 78) suggests that "public policy is anything the State chooses to do or not do. The United regulate conflicts in society and organized to deal with conflicts with other companies distribute a wide variety of symbolic and material rewards services to members of society, for which it obtained resources normally in the form of taxes. Thus, public policies can regulate the conduct, organize bureaucracies, collect taxes and distribute benefits, all at once. "

Reinforcing this view, Kraft and Furlong (2004: 25) assume that "public policy is a course of action (or inaction) that the state takes in response to social problems. Public policies reflect not only the most important values in society, but also show the conflict between values and what those values are the highest priorities in a particular decision. "Exactly, this is where the state plays its pivotal role between "do not do or stop doing" through the plans of national, regional and local development, same as mainstreamed the objectives and guidelines that govern the government work to Through its institutional and administrative instruments such as economic, fiscal and social policy, among others.

Of these instruments, sectoral public policies that respond to the powers, functions and concentrates mainly on the Constitution objectives, policy instrument by which seek to safeguard and ensure government action to improve living conditions, welfare and emerge promote the development of people.

It is through linking the government and public administration which aims to meet the national, subnational and local objectives to promote the development of countries. In this regard, Zermeno (2004: 28) argues that "development is also applied as a concept of economic policy-laden social and moral content is targeted development of a country, a society, a collective."

The author notes that "development goal, which generally means an improvement in social welfare. Thus, economic growth is only development in terms of greater prosperity, if it is fair, if modernization while driving progress social, if it is sustainable, if it finally means human development, understood as a step towards the full realization of all people. This concept of development is generally proposed by governments, multilateral development agencies, non-governmental organizations that pose objectives of social progress, political parties, among others. "

Since its inception, historically, the concept of development has been associated with economic growth, leading to boost economic policies that encourage the export and import of goods and services, attract private investment, creating areas of industrialization, enabling exploitation natural and labor resources, assuming this as evolution, progress and growth of the country, state, municipality, among others.

The concept of development involves multiple elements that represent a balance between quality of life, welfare, efficient public services, effective governance, environment and technology to the inhabitants of a given space. Specifically, Sunkel and Paz (1970: 37) reported that "development means achieving increased efficiency in the creative manipulation of their environment, technological, cultural and social as well as its relations with other political and geographic units."

Public policies: concepts and objectives

Society needs, demands and expects governments in their various orders, formulate and implement public policies that effectively contribute to achieving the objectives of social and economic development of the country, state and city in which they live.

These objectives and tools that should be used to achieve them must be consistent with government commitments to be elected for this charge. Understand that "public policy is the result of the activity of a public authority vested power and governmental legitimacy," the contribution made Meny and Thoening (1992: 91).

This translates legitimacy in defining Aguilar Villanueva (2009: 14), which considers public policy as "a set (sequence system cycle) shares, structured and causal intentional way, that aim to achieve objectives considered value to society or to solve problems whose solution is considered of public interest or benefit. "

Add the same author as the "intent and causation they have been defined by the dialogue that has taken place between the government and sectors of society; they have been decided by legitimate public authorities, which are implemented by government and state actors or these in partnership with stakeholders (economic, civil), and which give rise or form a pattern of government and society. "

The combination of these factors does not appear spontaneously, with the result of a planning process previously considered from diagnosis of the problem to the solution approach. In this regard, Aguilar Villanueva (2014: 24) points out that "politics is a purposeful behavior, intentional, planned and not just reactive, casual is set in motion with the decision to achieve certain objectives, through certain media is a meaningful action."

In this regard, says Ruiz Lopez (2009: 3). That "public policies can be understood as the privileged sphere of implementation of the covenant between state and society A new role of the state in the sense of making it more agile and organizer Here we rescue the sense of participation between these two actors, but the ultimate goal is to benefit society as we shall see later, a point that is often forgotten, hence the failure of many public policies. "

Public policy is defined as "a process that starts when a government or public manager detects the existence of a problem that, because of its importance, deserves your attention and ends with the evaluation of the results that have undertaken actions to eliminate mitigate or vary this problem "(Tamayo Saez, 1997: 281).

Indeed, one of the main reasons that public policies play a key role in the realization of government decisions, it is your analysis.

In this sense, Bardach (1998: 13) states that "policy analysis is a political and social activity"; understanding, this political-social bonding as a key factor for public policy. Finally, for a successful formulation and implementation of public policies must consider the importance of its political and technical dimensions respectively.

Methodology for the making of public policies

For the formulation of public policies is essential from a panoramic analysis ie from the consideration of national, subnational and local environment of the territory under study. Therefore, it is important to take the concepts, experiences and categorizations of various methodological tools, given that public policies are based on political science through multidisciplinary sciences that is supported such as economics, sociology, law, among others. This knowledge is applied to realities and public affairs in order to streamline the government work.

With respect to this dimension of analysis or study premise, Lahera Stop (2002: 18) prints its conceptual vision reaffirming that "public policy correspond courses of action and information flows related to a target audience defined democratically: which are developed by the public sector and often with the participation of the community and the public sector. A quality public policy guidelines or mechanisms include definitions or institutional changes and the forecast results. "

In this statement you can be perceived state interference in different economic activities mainly aimed at establishing national policies that routed the country's development. At this point, Olavarria Gambi (2007: 10) states that "a public policy is an intervention in a particular subject on which there is a sense that things are not going as we would like."

However, much phases, stages and cycles mentioned policies but what is the policy aspects? What?, considers there is only one way to do ?, about Gordon (1999: 197) raises "It is a guide to guide policy. It is therefore the first step to implement public policies. Part of the process of policy formulation is the analysis that is performed in order to formulate and develop policies. The problems can be treated in different ways and with different instruments, ie, there is no single way of dealing with the solution or treating the problems, but a variety of policies. "

Briefly, Bardach (1998) suggests that "the way of the eight steps, based the main function of this technique is to remind important issues and options that might otherwise be forgotten, its main flaw is that, taken alone risk be a mechanistic form ". Of these steps they emerge: define the problem, obtain information, build alternatives, selecting the criteria, project results, compare the costs and benefits, decide and tell the story. Nothing more successful than this approach, governments tend to take these mechanisms as a recipe that is applicable in all national contexts, at least as shown by the results and the apparent lag in other areas where the population is immersed.
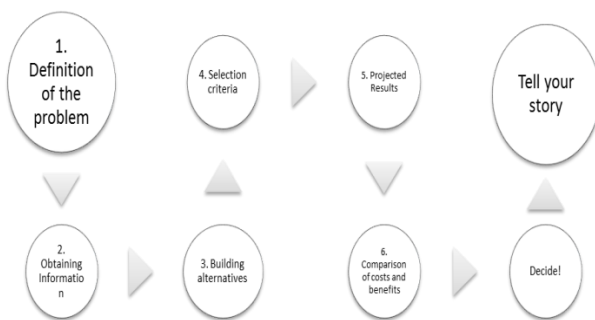
Figure 1 Steps for analysis of public policies

While the eight steps mentioned above are usually presented in a format of interconnected picture, I present it in a circular format is the way in which we can see that the steps both this methodology and other: are cyclical, as from the beginning at the end of that cycle must evaluate the results and impacts obtained following the implementation of public policy, adding the factor of change; ie include the trends, needs, detect problems in the process of feedback.

With respect to public policy cycle, Lahera Stop (2002: 73) notes that "public policies can be distinguished four analytical moments - which are not necessarily consecutive stages - the origin, design, management and evaluation of public policies"

This approach provides an important variant as is the management of public policies, which not only involved the government, involving economic, social, cultural actors, among others.

This interaction creates an interdependence within the scope of their activities, which can promote the "success or failure of public policy", obviously considering the concepts and approach it. Finally, Aguilar Villanueva (1996: 32) states that "the structure of public policies are in fact a cycle; as such, within each stage, the cyclical process repeats itself, making it possible to consider that in the evaluation phase priority there are two stages: the decision and implementation. "

With regard to the implementation of public policies, and Mazmanian Sabatier (2014: 327) report that Donald Van Meter and Carl Van Horn present a systemic model of the process of implementation of public policies and include the factors affecting performance program. This process considers the following factors:

- Criteria governing public policies

- Support that exists in the political environment into policies

- Economic and social conditions

- Characteristics of the agencies responsible for implementation

- Communication standards and other policy decisions and interagency

- Incentives to promote acceptance of policy decisions, and

- Political decisions of officials responsible for implementation.

They combined these factors are linked to the role that the public servant within the government structure; that is, that part of that achievement should be a motivation for public service, understand how the public sector, the ability to interface with all stakeholders within the government structure, flexibility in meeting the goals and approach to work the population, which in turn plays a central role through citizen participation, to promote transparency and efficiency of public administration.

Evaluation of public policies

To evaluate public policies, there are numerous methods such as: evaluation of processes, products, results, impact of government programs, institutional assessment, rapid assessments and multidimensional evaluation in decision-making.

Furthermore, the existence of conceptual methods and assessment methods are discussed in the context of the fundamental characteristics of public policy, whose main objective is to examine the origins and possible solutions to public problems, considering the democratic context, the role of public and private institutions, as well as social organizations.

The evaluation of public policies, according to Aguilar Villanueva (1996: 48) is "to assess policy from its beginning to its end then allowing that the actions or omissions of the state, causing positive or negative consequences in society, can be mitigated, increased or neutralized to solve the problem that gave rise to them. " That is, that this process must inevitably contain a rational and intentional sequence that resulted in government decisions.

On types, forms or types of evaluation more favorable, Salazar Vargas (2011: 68) states that "it is possible to evaluate all public policies at least six different ways: using the media, performance, efficiency, impact, user satisfaction and finally to participatory evaluation." The author describes the evaluation forms which are then outlined in summary table.

Evaluation Form	Feature
1. media	Confronts the objectives of public policy with the means at their disposal; that is, the contrast objectives vs. Results.
2. results	Vs. contrasts schedule what was done, it is done once a year is assessed as level budget level decisions.
3. efficiency	Contrast the objectives of the policy actions taken to achieve the objectives; that is, how much it cost to get those results?
4. impact	It is a type of more qualitative assessment; it can establish what changes are occurring public policies on individuals and groups.
5. Satisfaction	Considered a subjective element, as seen to what extent the effects of receiving a specific public policy believe that their problems were solved, their demands were met or unmet needs.
6. Participation	It combines three major actors involved in the process: external experts, public administration and users. It is possible to obtain a better representation of reality that seeks to understand.

Table 1

This research uses the mechanisms of evaluation of the impact of their own public policy case study, as are necessary to determine the relevance of these, as well as establishing standards of efficiency, effectiveness and transparency that will enable the objective analysis of the results that cast the public policies implemented in the study period and provide elements to contemplate a change in the working guidelines, restructuring or transformation of the guidelines on which government decisions are based.

While evaluation is an essential procedure implementation processes of public policy or of any decision process requires a number of elements to constitute a classification that allows establishing a point of being free as estimated and reality, as for results and efficiency of the policy implemented.

TIPO DE ENFOQUE	PROCEDIMIENTOS
Descriptivo	Basada en la elaboración de un inventario de los efectos de la intervención pública, a partir del análisis de los efectos o variaciones entre un estado inicial (1) y uno final (1 + n). De carácter exhaustivo y neutral, su intención no es proporcionar consideraciones éticas ni valorativas.
Clínico	Explica por qué en la aplicación de una política, algunos objetivos se alcanzan y otros no, mide la efectividad de la política con base en los objetivos y la aplicación de un razonamiento deductivo. Las técnicas más utilizadas son: la encuesta estadística, la evaluación sumaria (antes y después) y la evaluación formativa (seguimiento progresivo). Los valores aceptados son los propios de la política evaluada, dados por la autoridad responsable.
Normativo	Califica la política con base en normas externas, aunque el evaluador puede definir sus propios objetivos, con relativa independencia de los oficiales; mide la eficiencia, eficacia, equidad y pertinencia con base en definiciones y reglas propias; utiliza un razonamiento deductivo y las técnicas están sujetas al criterio del evaluador. Los valores aceptados, aunque con normas y principios establecidos formalmente y con anterioridad a la evaluación.
Experimental	Controla científicamente los efectos concretos de una política a partir de sus objetivos oficiales, comparando al grupo afectado por la política con otro de referencia o control y utilizando un razonamiento inductivo, con técnicas sustentadas básicamente en grupos de control elegidos aleatoriamente y en aquellos no equivalentes desde el punto de vista estadístico. Los valores de verdad se basan en todo aquello verificable a través de la experiencia.
Pluralista	Realiza un análisis minucioso con la finalidad de mejorar la aplicación de la política con el acuerdo de los involucrados y de los propios objetivos de la misma. Utiliza el razonamiento inductivo y de consenso que define los criterios de efectividad, eficiencia, equidad y adecuación. Utiliza técnicas que derivan de la elección hecha por una comisión plural y de acuerdo a las necesidades del caso. Se sustenta en modelos como: el lógico, el experimentalista, el pluralista y el demográfico. Los valores aceptados por los propios actores a partir del contexto
Cualitativo	Para obtener los resultados se utilizan criterios provenientes de diversas percepciones, es decir, se hacen preguntas sobre un tema en particular con opciones muy concretas de respuesta múltiple, por ejemplo: bueno, regular, malo.
Cuantitativo	Este tipo de evaluación utiliza indicadores elaborados previamente, que posibilitan contabilizarlos numéricamente. Los resultados son cuantificables, detalla edades, tallas, pesos, entre otros.

Table 2 Main elements for evaluation of public policies

For greater precision in this process it is crucial to stick to the criteria in the descriptive approach about Amparán Guerrero (1995: 4) notes that this approach "produces accurate and thorough of the effects of public action list" and adds that "after the period established to carry out the evaluation, an inventory of each of the changes that occurred in the social sector in which this public policy was established."

This approach seeks to identify the changes that have been generated as a result of the implementation of public policy and inventory, criteria, objectives and scope of government decisions in the study period. Consider these elements will allow to analyze the social and institutional landscape of the municipality.

Public policies and national, regional and local economic development

The modern conception of the state that considers both the political system and the political power to perform economic functions, such as setting monetary policy, macroeconomic stabilization, ensure the provision of public goods and services, tax collection and redistribution of property, with the goal of generating a positive impact on the quality of life of its population. That is, for the fulfillment of these functions the State formulate public policies according to the priorities identified their institutional strategies, prioritizing the issues raised in their government programs.

The programs are through a rigorous planning process that includes the national regulatory framework, international agreements, local regulations and other legal instruments that set the stage for the operationalization of the plans and programs.

Thus, as the guidelines governing economic policy focused on national economic growth through a process of encouraging investment it will be reflected in productive industrial sectors, more dynamic services.

The process of economic growth is given by the amount of wealth or resources (economic, natural, human, technological, etc.) in a given space. This wealth is generated from infrastructure available to the country, the ability of citizens to produce certain goods and technology that is counted. But beyond making more efficient factors to boost economic growth there is a matter equally or more important as economic development that considers the welfare of the people living in that territory, and that produce such goods, which called Capital human.

The binomial growth - economic development is indivisible entity and cannot consider one without the other; that is, economic growth is a key part of economic development.

With regard to economic growth, the World Bank (2015) believes that "when income countries increases, people benefit. While there is no known formula to stimulate economic growth, the data can help policy makers to better understand the economic situation in their countries and to guide any effort to improve it. "These data are reflected by indicators such as gross domestic product (GDP) and gross national income (GNI), as well as indicators of capital, employment, investment, savings, consumer spending, imports and exports, among others.

Economic growth is seen as a tool or a way to realize economic development. This remark coincides with Sen (2000: 31).

Which states that "development has to focus on enhancing the lives we lead and the freedoms we enjoy The expansion of the freedoms we have, reason to value not only enriches our lives and releases restrictions, but they allow to be fuller social persons, exercising their own will and interact with - and influencing - the world in which they live. "

It is necessary to place the concept of economic development at regional level under the understanding that the region consists of land, natural, similar sociodemographic and cultural factors must be balanced and sustained.

In this regard, Ken Rodriguez (2014: 37) states that "the need for regional development has led to also recognize the need for coherence between policies, strategies and projects, and that they result in visible improvements in quality of life people. In this sense speaks currently developing the localities where people's participation is essential, and where innovation penetrates to the field of public and private management of the main actors. "

For the local level, it is important to guide public policy and link the processes of regional and local development, to meet the needs and interests of the population, and fundamentally promote integration and participation in the decision-making process; from the municipality which is the first contact between citizens and the government, which is critical for evaluating and measuring the impact created by these policies.

In this regard, Tello (2010: 3) assumes that "local economic development impact on improving competitiveness, increasing sustainable development and ensures inclusiveness of growth through a set of disciplines, including physical planning, economy and marketing.

It also incorporates many features of the local government and the private sector, such as environmental planning, business development, provision of infrastructure, real estate development and financing. "

For Meny and Thoenig (1992: 256) "the first steps to study local policies are given to studies 'municipal', ie in-depth analysis of local power not only in its traditional dimension (election, parties) , but also on the actions carried out. "

While local initiatives to promote indicates Ken Rodriguez (2014: 25) that "the lifting of the inventory of resources required materials, physical and human resources to meet the potential of local development, which is an important input for the management public and public policy development. "

To carry out the evaluation of public policies focused on the local level, must first divide it into phases, establish the overall picture of the city (information gathering of officials and stakeholders), it is necessary to analyze and interpret information, to make appropriate measurements that help to develop solutions according to the reality of the municipality.

Public Policy related to the regional and local development

From the early 70's of last century, the first question on meaning of development with respect to economic growth is done, and it was suggested that measures and macroeconomic performance was necessary to adhere to its effects to become satisfaction the basic needs of the population.

Economic growth by the Inter-American Development Bank (2010: 7), understands that the increase in output and income per person in the long run.

Growth is the process by which national, regional economy or the world economy becomes richer

The growth means increased production recorded a country over time. The development studies the growth of an economic system over a long period of time, incorporating the changes that occur at the horizon: the productive structure, technology, institutions, social relations and policies affecting the economy turns. Therefore, long-term, growth involves the development, as changes occur in the system. Over a long period of time there is no growth without development Zermeno (2004: 7).

Considering this trend reconceptualization of economic development, various documents and research concern and some agree that the first global initiative taken between developed and developing countries is the Stockholm Declaration, which was held in the framework of the UN World Conference on the Human Environment, held in June 1972. In that statement, the concern of the international community about environmental problems and the development said.

In 1976, during the World Conference of the United Nations Human Settlements, held in Vancouver (Canada), the need to improve the quality of life was established as a priority, and propose conditions to provide housing for the population and sustainable development human settlements. In these statements, several events are added to the global and regional level that have focused on seeking solutions to environmental and sustainability problems of the population.

As it established in 1987 by the World Commission on Environment and Development, organized by the United Nations (UN) in the document entitled "Our common future" notes that the main areas related to the conceptualization of development are grouped into:

- Human being: health, education, housing, safety and protection of children's rights.

- Interactions population, equity, distribution of wealth, economic development, production and consumption, government.

Subsequently, the measurement of qualitative development as construction elements Human Development Index and the formation of the Development Agenda were incorporated, both driven by the UN in 1990 and 1995 respectively. These instruments considered as main variables the existence of social and political stability in the country; revitalizing the economy and progress; the environment as the basis for sustainability; justice as a pillar of society and democracy as the best form of government.

From these events, when considering different types of development, regional development, regional development, and local development in contemporary studies are configured as key elements.

These include the demarcation of territory, the presence of political and social leadership, shared values that form a local identity, added sustainable approach that allows us to propose new ways to promote comprehensive development.

The roots of the concept of development are linked to economic development, which are configured in a postwar idea that were subsequently taken up by the UN in subsequent policy documents. Specifically, for Latin America - regional bloc that Paraguay is part- this topic focused through the United Nations Economic Commission for Latin America and the Caribbean (ECLAC) that he made and continues to make an analysis of economic and regional development as a priority topic providing analytical instruments, basis for attaining government commitment and action at various levels of government.

The development is also applied as a concept of economic policy-laden social and moral content. Zermeño refers (2004: 28) that "the objective is the development of a country, is the goal, which generally represents an advance in social welfare. Thus, economic growth is only development in terms of greater prosperity, if it is fair, if modernization while driver of social progress, whether it is sustainable, if it finally means human development, understood as a step towards the full realization of everybody".

It also ensures that "the concept of development is generally proposed by governments, multilateral development agencies, nongovernmental organizations posed objectives of social progress, political parties, among others." This situation is linked to the guidelines established in government programs in this area, given that stem from the international commitments assumed by governments as a result of the process of international, regional and local integration.

In this sense, Boisier (2001: 3) states that "economic development is an ongoing process whose essential mechanism is the repeated application of the surplus on new investments, and has, also resulted in the continued expansion of the production unit it is concerned. This unit can be indeed an entire society. "

That is, the dynamic nature and dimensions of development, which is not only the economic aspect, but encompasses social, political, ecological and cultural, that link both global, regional, sub-national and local spaces aspects.

Definition and objectives of the regional development

While the concept of development was coined from the 70's, its evolution and updating over the years, has allowed a broad conceptualization clearly establishes definitions, objectives and classification of national economies; allowing governments to take decisions aimed at reducing social and economic inequalities of the population, which in turn plays an important role in terms of their participation in the decision-making process and interaction with the social, economic actors and government.

To understand the development from its regional dimension and its links with the economy, one must start from the concept of space, region and territory. In this regard, Celis (1988: 12) has established that "every economic space is located in a geographical area."

The author notes that "economic space is where the man produces, lives and includes the location of social infrastructure" and defines a region as "a unit of a larger whole, which usually without any specificity means any lower part of the territory to the country as a whole with concrete specified that prevent unity. "

The grouping of these spatial units that make up a region with similar characteristics and economic dynamism must establish mechanisms for comprehensive planning in order to promote balanced regional development.

On this issue, said Ken Rodriguez (2014: 20) that "the regional development implies balance in the development of regions within the territory. To achieve the development of each region is required to combine their own or endogenous factors, to generate wealth and prosperity. Since each region is different, this combination is unique and it depends on your local development. "

The approach of balanced regional development from the territories that compose and endogenous factors should be considered from a process of national, subnational and local planning, from socio-economic, cultural and municipal management features. From a strong government commitments and not take the idea of local development and management trends, but as a starting point for reducing social and economic disparities in the regions.

The regional and local development

The link between the regional and local development match public policies formulated by governments, which essentially indicate strategic guidelines on economic, social development, among others.

The main feature is that the municipalities are the first government agencies to capture firsthand the needs, strengths and potential of that space and the capacities of people, same that would boost a balanced local development. It seems that fashion is a theme; however, is the first approach to the reality of the population and from this interpretation qualify for public take informed decisions based on environmental assessments and analysis tools.

Accurate Boisier (2001: 7), currently the "local development if it were a popularity contest, the concept of local development win first place in the preferences. Here undoubtedly much to say. Of course, now it is a substantive concept (content rather than mere container) that refers to a certain type of development that can take shape in territories of varied sizes, but not all, given the inherent complexity of the development process. "

The same author adds that "it is clearly an oversimplification to assimilate the concept of local development to the idea commune to city. In fact, local only makes sense when you look, so to speak, from without and from above and regions and local areas are looked at from the country. As the province is local from the region, the commune it is from the province, and so on. "

About Di Pietro (1999: 27) states that "the local is a relative concept to a wider space. It can not be analyzed without reference to more comprehensive space in which (municipality, department, province, region, nation) is inserted local. He currently plays with the local / global contrast showing the paradoxes and relations between the two. "

The author also believes that local identity "is the result of continuity in time consciously lived by a human group, generating a cultural accumulation system in terms of norms and values. Every society is a system of values internalized by its members . It implies belonging to a community and be recognized on a shared collective identity. "

Bossier (2001: 18) states that "it should be of interest to development practitioners, among which the most important are precisely the local authorities, it is that it requires a real mental retraining to intervene with any chance of success promoting development, not just growth. There in front a huge and vital task for the academic community, to install in the curricular structure of undergraduate and graduate's own paradigm of complexity, "referring to the practical question.

With respect to local development, Boisier (2001: 14) notes that "progress in the region should be understood as the systematic transformation of the regional territory in a collective subject. The development will always appear as a local process, endogenous, decentralized, capillary, and continuous or discontinuous on the territory. "

Meanwhile, Di Pietro (1999: 22) believes that "a local society is a singular and unique expression, but in turn is part of a structural reality, the operating logic transcends local guidelines precisely what poses the challenge of home. maintain an openness to the universal from the particular,. that is, how to enter the universal from and from the specificity of its own, through an attitude of "think globally, act locally" is possible to study a process of accumulation locally as actually entirely unique, but enrolling in it certain structural regularities system product in which it is inserted. "

From this position it is possible to analyze the context of any country (a global, sectoral or regional level), without the need to redefine the conceptualization of the theoretical and / or methodological instruments since the analysis of public policies based on science disciplines policy. The main contribution of public policies is the multidisciplinary areas of knowledge from which it relies, which will allow for a panoramic analysis of the impact of the implementation of public policies and the effects of these decisions.

In recent years, it seems that the conceptualization and terminology of sustainable development have attracted "reflectors" of the different levels of government and its key players. However, this work is not intended to focus on subjectivations or interpretations of political discourse on the subject.

While governments are responsible for ensuring compliance with its objectives, other actors, such as educational institutions, organized civil society and international organizations, can contribute to strengthening public policies, plans and government decisions to ensure development processes social and economic; also they impact on actions that promote improving the quality of life of current population and that of future generations.

Society needs and expects governments in their various orders, formulate public policies and implement programs that effectively contribute to achieving the objectives of social and economic development of the country, state and city in which they live. These objectives and tools that should be used to achieve them must be consistent with government commitments to be elected for this charge.

Public policy is defined by Aguilar Villanueva (2009: 14) as "a set (sequence system cycle) shares, structured intentionally and causal, that aim to achieve objectives considered of value to society or to solve problems whose solution is considered of public interest or benefit. "

Adds the author, that the "intent and causation have been defined by the dialogue that has taken place between the government and the public sectors; which they have been decided by legitimate public authorities; that they are implemented by government and state actors or by them in association with social partners (economic, civil), and which give rise or form a pattern of government and society. "

In this sense Ruiz Lopez (2005: 3) states that "public policies can be understood as the privileged sphere of implementation of the covenant between state and society A new role of the state in the sense of making it more agile and organizer here.. we can rescue the sense of participation between these two actors, but with the ultimate goal of benefits to society. That is how we will see later at a point that is often forgotten, hence the failure of many public policies. "

Precisely one of the main reasons that public policies play a key role in the realization of government decisions, it is your analysis. In this sense, Bardach (1998: 13) states that "policy analysis is a political and social activity"; Understanding this socio-political links as a key factor for public policy. To reach the next step will be the evaluation.

The completion of the evaluation of public policies focusing it locally, it must first divide it into phases; in addition, to establish an overview of the city (information gathering of officials and stakeholders), analyze and interpret information to make appropriate measurements that contribute to establishing solutions according to the reality of the municipality.

Meny and Thoenig (1992: 256) The first steps to study local policies are given the 'municipal' studies, ie in-depth analysis of local power not only in its traditional dimension (election, parties), but Also in the actions it carried out. There are numerous methods for evaluating public policy, for example, the evaluation of processes, products, results, impact of government programs, institutional assessment, rapid assessments and multidimensional evaluation in decision-making.

Besides the existence of conceptual methods and assessment methods are discussed in the context of the fundamental characteristics of public policy, whose main objective is to examine public issues, their origins and their solutions in democratic contexts, counting on the role institutions, organizations and collective action. Weiss (1998: 56) defines evaluation as "a systematic assessment of the process and results of a program or policy, compared with an implicit or explicit set of standards as a means of contributing to improved program or policy".

For the local level, it is important to guide public policy and link the processes of regional and local development, to meet the needs and interests of the population, and fundamentally promote integration and participation in the decision-making process, from the municipality which is the first approach of the citizen with the government, which is critical for evaluating and measuring the impact created by these policies.

Regional and local development and public policies

Focusing on the theme follows this requires a brief outline of the structure of local government, national guidelines and local development plans, specifically with regard to areas of competence the subject of study; then focus on the description of the perspective of public officials responsible for implementing the guidelines established in its strategic plans.

Indeed, for the implementation of these plans local governments can be linked to international institutions promote development through the financing of local economic development projects, such as: the United Nations (UN), the Economic Commission for Latin America and the Caribbean (ECLAC), the Organization for Economic Cooperation and Development (OECD), World Bank (WB) and the Inter-American Development Bank (IDB). For this, the municipality requires institutional strengthening; modernization of management at different levels, strategic planning for comprehensive development, organized participation of civil society and respect for local identities and particularities.

In this sense, a fundamental contribution is made by Di Pietro (1999: 45)., Notes that "historically the municipality has been studied from a legal and institutional perspective Changes in recent years -Transformation the state and the economy, increase poverty, etc.

Have forced their study as an agent for integral development, involving equity, security, sustainability of the process, participation and democratic governance system. "

Therefore, it is necessary to analyze the development from regional and local focus, as the municipal government helps foster the exchange of experiences from the implementation of public policies in different areas of development of their localities. It is necessary to define the starting point for the development and implementation of the objective of this document, it is imperative to define the unit of analysis is the local government from the local development approach.

Conclusions

The relevance of government decisions lies in prioritizing public policies with a view to a comprehensive process that encourages national, subnational and local development, from the identification of needs, capacities and potentialities own environment and the population combine them in coordinated and efficient actions that impact strategically on promoting equitable economic, social, political and cultural development.

In this regard, as referred Kraft and Furlong (2004: 25) public policies are "a course of action or inaction that the state takes in response to social problems. Public policies reflect not only the most important values in society, but also show the conflict between values and what those values are the highest priorities in a given decision "; that is, that from the link between government and society can be built alternatives that combine tools and processes within government that allow crystallize the progress in development.

Moreover, the process of public policy must be added assertiveness and efficiency in implementing them, given the high economic and social impact they generate. Besides requiring theoretical and technical knowledge, it should be considered political will and governance capacity of the government, targeting efforts not only in the short and medium term, but plan on the basis of far-reaching results and realizing that regional situations and Locals are changing, not governed by periods of governments.

While the State, performs economic functions as the formulation of monetary policy, fiscal policy, macroeconomic stabilization, provision of public goods and services, in order to generate a positive impact on the quality of life of its population, after categorization reflected institutional priorities through public policies that relate to regional and local development strategies, responding to government programs, which essentially indicate strategic guidelines on economic, social development, among others.

Indeed, this planning must take as core to municipalities because they are instances in situ needs, strengths and potentials of physical space and population. In addition, to develop mechanisms for the participation of society in decision-making processes, this will generate greater confidence in government decisions and enhance the sense of belonging to the place where it is intended to have an impact.

This is not only to comply with the steps for the formulation of public policies should address the idiosyncrasies of the target population, the characteristics presented in the municipality or region. While this responsibility lies with governments, through their plans, programs and activities, this point must reconcile the management skills of its officials and political will of the actors.

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ISSN-On line: 2414-4827
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CENTENO-ROA, Ramona. Public policy and its relationship with local economic development. ECORFAN Journal-Republic of Paraguay 2015

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Global value chains, learning, innovation and policies. CGV case of aviation in the state of San Luis Potosi

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Abstract

The structure of international trade has changed in the last five decades, it has grown from a single component, goods, structure or current composition, with three components, goods, services and intermediate goods. One factor in this change, which has broad and deep implications are global value chains. A study and implications is dedicated this article, with particular reference to the Global Value Chain aeronautical present in the state of San Luis Potosi, and learning and innovation options for scaling the participating companies.

Global value chains, scaling, learning and innovation

Citation: VALDIVIA-ALTAMIRANO, William. Global value chains, learning, innovation and policies. CGV case of aviation in the state of San Luis Potosi. ECORFAN Journal-Republic of Paraguay 2015, 1-1:78-85

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Introduction

The economic growth and development is one of the priorities of governments for its wide repercussions. An interesting option that has been developed for Asians to join global value chains countries. This has allowed them to advance productive and socially, an element that lacks the experience of the last decades in Mexico and Latin America. To explore this option is dedicated this work, particularly the CGV aeronautics, present in the state of San Luis Potosi.

Background

Changes in the structure of international trade

International trade has evolved over the last sixty years. At the end of the Second World War, the weight of international trade on global GDP was lower than those recorded in previous years to World War I levels; is from early 50s to their weight starts increasing, goods were the central part of the trade, supported by services (transport, insurance and some sightseeing). In the 60s the services become more important in GDP in advanced countries, in the 70s this trend is reflected in international trade in services 80s join the multilateral negotiations, joining the WTO Agreements 1994.

At present, services account for 20% of all internationally traded, and growing. In the 80s when it begins to gain strength trade in intermediate goods and parts internationally, partly driven by the global value chains, CGV, as they were relatively new issues, the negotiating mandate for the WTO Doha Round, launched in 2001, they not included, currently trading being done in regional or bilateral negotiations outside of the multilateral negotiations, which is where greater overall effect would[6], trade in goods or parts currently accounts for one third of international trade.

The facts stated in the preceding paragraphs show that the structure of international trade has changed from that which existed until the 60s years of the last century has grown from a component goods in the first seven decades of the twentieth century, the current three components: goods, services and parts or components (intermediate goods).

Trade in intermediate goods has continued to grow, its rise cannot be understood without understanding the Global Value Chains, CGV, is one of the novel aspects of the last three decades is relatively new, so their analysis yet It is being developed as well as methods to measure it.[7]. It is an important phenomenon not only in terms of production and investment (including FDI) but also infrastructure, logistics and among others, ie it is complex. There are other proposals for naming designation "global value chain" CVM "relocation of production", "Fragmentation of production".

[6] Bianchi, E. and C. Szpak (2013), global production chains: Implications and governance, FLACSO, Buenos Aires.

[7] Blyde, Y. (Coordinator) (2014), Mill synchronized. Latin America and the Caribbean in the era of global value chains, IDB Special Report on Integration and Trade.

GVCs

Among the causes of GVCs we are: economic, technological, services, FDI, multilateral and regional negotiations, which have been changing over time, its origins can be traced beyond the last three decades[8], the internationalization of production is not a new process [9].

GVCs are not static, rather they are dynamic, changing. For example, Japan has relocated first part of its production in Korea, Taiwan, Hong Kong, about the term "flying geese" which refers to the fact that an advanced country, helps and encourages the development of its neighbors was coined.

Then delocalized part of their production to China, Thailand. Or if we consider the case of China[10], GVCs incorporated from the 80s, a time production was done internally, now a part is made in (less developed) countries nearby. This figure is not in Latin America, perhaps because of the lack of a country with great productive development (referring to Mexico and Brazil, which in theory should lead becomes), the distances between countries, higher than among Asian, limitations interconnectivity and infrastructure, among others[11].

The adoption of an export model and market economy by Japan, after the end of World War II, and the subsequent adoption of the model by South Korea, Taiwan and Hong Kong, allowed production succeeded in joining companies in developed countries, is another cause of the development of GVCs. Also the success of these countries, meant that the area of high-income countries should be expanded, to be formed by the US, Western Europe and Australia, went on to have an Asian component, Japan, South Korea, Hong Kong and Taiwan, which were incorporating their neighbors.
GVCs are being developed in the primary and tertiary secondary sector (manufacturing), and producing various goods and services such as televisions, cell phones, cars, food, financial services, healthcare, software, business process outsourcing (BPO by his acronym), others.

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[8] Although before the two world wars there were companies with international operations, the process of corporate globalization is accentuated after the Second World War, in parallel to the internationalization of companies in the multinational banking, which follows its customers is brewing in 60s the Euromarket capital develops, unregulated financial space nationally. Important background of globalization.

[9] Agtmael, A. (2007), The Age of emerging markets. How a new class of world-class companies are taking the world Editorial Norma, Bogotá. Baldwin, R. (2013), Global supply chains: Why They Emerged, Why They Matter, and Where They are going in Elms, D. and P. Low (Eds.) (2013), Global Value Chains in a changing world , WTO, Fung Global Institute and Nanyang Technological University, Switzerland. Spence, M. (2012), The inevitable convergence. The future of economic growth in a world at various speeds, Taurus, Mexico.

[10] GVCs incorporated in the 80s, which combined with the adoption of market model, opening up, gradualism and flexibility in economic management, he has been a great economic development. In fact some consider it a return, as to the Middle Ages, had equal or better growth than Europe.

[11] Kamiya, M. (2012), Latin America's Prospects for Upgrading in Global Value Chains, Mimeo, Colegio de Mexico.

The development of GVCs is heterogeneous, while manufacturing output decays, agriculture tends to be vertically integrated.

Trade based on intermediate goods is different from goods that was located in one country at the beginning of the industrial era (more than two centuries ago), and then based on plants of the same company or with few suppliers, few countries, most of the last century. Currently, a product can be produced by produced by different companies, in several countries, Baldwin (2013), apparently is a trade that is not based on the theories of absolute advantage Adam Smith or comparative advantage parties or on D. Ricardo, in which the countries specialized in the production of a good, all the good produced in one country, because they could produce at lower comparative cost. Although if you look good, or a company looking to produce good based on a lower price, whether it occurs wholly or parties produce other companies, in different countries, if in this way is able to produce at lower cost relative . It is still the basis of comparative advantage, but viewed in the context of globalization, with higher technology, lower production costs and transport, improving and cheaper communication and decrease (partial) trade barriers. Appreciate that at the base of the CGV is the comparative advantage is more complex now.

With GCS, now countries need not necessarily specialize in the production of a good; can specialize in part or parts thereof. It is an interesting option for companies in developing countries, because they no longer create the entire production process to compete internationally, they can join the globalization, participating in one or more stages of production of a good in a CGV; accessing highest levels, knowledge and contacts.

GVCs are key to the organization of the current global production, although located in different countries, geographical location really is not wide, has a strong regional character, and have appeared what is called "Factory North America", " Factory Europe "and" Factory Asia ". In each area or "factory", there is a center, a country of more productive and technological development, and a periphery, in which the production of lower technological content and value added is done, but with lower costs for the operations they perform. US, Germany and Japan, are often categorized as centers, China advances to be downtown.

The study of GVCs are often organized around four areas: i) The input product structure CVG for a product, ii) The geographic scope of the CGV of a product and the trends in that market, iii) The structure of governaza the CGV and sector analysis, iv) The institutional framework of the GCS, v) Scaling of local businesses and participants in the GCS. It is the approach we will take to the study of aeronautics CGV San Luis Potosi.

Participation of companies in the global aerospace value chain, CGVA in San Luis Potosi and escalation

The aviation industry is already present in Mexico is a key sector for our economy because it shows high growth rates, it is technologically advanced, high quality standards used, generating qualified employment, has important linkages among others. Mexican aviation industry produces goods of low technological content (relatively, it is expected to start), but gradually moving to better jobs and products. Mexico is a good investment receiver to that sector, and it has regional clusters in aerospace, Northwest, Northeast, center (where is located San Luis Potosi, Queretaro, Mexico City, State of Mexico and Puebla).

If we classify businesses by size (employment) is that 70% are medium and small, 23% are large and 7% micro; recorded a significant participation of foreign companies. 80% of its production is exported; the main markets are the US (74%), Canada (8%), France (3%), Great Britain, South America (catchment area) and others.

The aviation industry in San Luis Potosi starts in 2000, showing dynamism, business size composition (employment) is similar to the national trend, a high proportion of medium and small businesses. A development has greatly helped the automotive, electronics, domestic chemical and state experience, this ability to learn was one of the determinants of the location of the CGVA in the state and Mexico, as suggested about learning as a competitive advantage. Recently, gradually they are installed engineering centers and linked to the export activity and assembly, to country and state level design; statewide use of quality systems and certification companies, innovative experience, the proximity of the US market and connectivity with other countries, the existence of good communications, roads, and rail car tracks (north stands, Midwest and East), airports, customs facilities, technical and university staff, well prepared, among others. The Latin American experience greater escalation in GVCs suggests that depends on several factors, internal to enterprises, and external, and institutional infrastructure, human resources and support.

Potosi aeronautical production of foreign and Mexican companies, generates direct and indirect jobs, exports most of its production to the US, Britain and South America, its influence is diversified; It is a supplier of companies such as Boeing, Anixter, General Electric, others (nationally and internationally).

The CGVA SLP is also located in the manufacture of commodities, where the quality requirements are established by companies that are suppliers, while aeronautical products for further development are more demanding, which are set by government authorities . In turn, the suppliers of the companies CGVA SLP are mostly foreign companies or subsidiaries; here are options for improvement, for example looking to be installed in the country. Companies in the SLP CGVA have plans to produce higher value-added chain scale, and go to the pre and post production.

Policy Implications

Considering that international trade is composed of three components, it has important consequences in various aspects of economic policy, such as industrial, commercial, educational and innovative policy. It is also necessary to have integrated policies, coordinated (at the federal, state and local level, by sector, public-private), decentralized, with adequate resources, accountability and flexibility of organizational design. The industrial, commercial and integration policies are directly related to the GCS.

In Mexico, until recently, industrial policy and integration was focused on promoting the total output of goods nationally, while in Asian countries, a region that has best taken advantage of the opportunities of the relocation of production, industrial policies are more CGV regional focused, with good competitive results. This can be seen in assessments of industrial policies, support for SMEs, in several Latin American countries, integration into global chains is not mentioned, and the focus was still supporting companies that produce all this is changing recently.

It is also true that Asian countries have been better able to seize opportunities that invested heavily in education and infrastructure, although there are differences between them; their achievements in their international integration, highlight the importance and necessity of these experiences and learn more from other countries, and draw lessons for the Mexican case. Attracting foreign investment should be more proactive and selective companies seek more actively involved in GVCs, prioritize strategic or attractive companies; these investments require adequate human resources to their needs, something to promote, they can learn and innovate.

Justification

The development of GVCs has it enabled several countries to advance economic development, although Mexico participates in them and is the most advanced in this area in Latin America, yet the kind of integration that records is not like of which is recorded in Asian countries, emblematic in many ways. Addressing issues such as learning and innovation in GVCs, particularly in aeronautics CGV SLP, will open horizons insertion best in them, with wide repercussions. At the same time we believe that should be complemented by other actions and policies.

Objectives

- Understand how they learn and innovate the companies involved in the aviation CGV state of San Luis Potosi.

- Understand the main drivers and policy and institutional constraints in strengthening the learning and innovation of the participating companies in the aeronautical CGV SLP.

- Identify the key drivers of business involvement in the CGV SLP.

- Estimate the main trends in the medium and long term CGV aeronautics.

Design of research

Has reviewed the basic literature, it is in Phase conduct interviews to companies, responsible for development of the sector in SLP and other states.

Econometric analysis of time series of monthly production sector and the analysis of production at the enterprise level will be made; for the last 10 years; direct, indirect and induced effects are estimated.

Conclusions

Scale power options are available at CGV, as evidenced by the Asian experience, Mexico has manufacturing tradition, and some experience in the aerospace CGV so should be encouraged in scaling it. The internal effort of companies is a key element associated with the development of suppliers and logistics, to be accompanied by infrastructure resources, human resources and incentives.

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