

Volume 6, Issue 10 — January — June — 2022

Journal-Economic History

ISSN-On line 2524-2059

RINOE®

RINOE-Bolivia

Editor in chief

SUYO-CRUZ, Gabriel. PhD

Executive director

RAMOS-ESCAMILLA, María. PhD

Editorial Director

PERALTA-CASTRO, Enrique. MsC

Web designer

ESCAMILLA-BOUCHAN, Imelda. PhD

Web Diagrammer

LUNA-SOTO, Vladimir. PhD

Editorial Assistants

TREJO-RAMOS, Iván. BsC

Philologist

RAMOS-ARANCIBIA, Alejandra. BsC

Journal-Economic History, Volume 6, Issue 10, June 2022, is a journal edited semestral by RINOE. Loa 1179, Cd. Sucre. Chuquisaca, Bolivia, WEB: www.rinoe.org journal@rinoe.org. Editor in Chief: SUYO-CRUZ, Gabriel. PhD. ISSN: 2524-2059. Responsible for the latest update of this number RINOE Computer Unit. ESCAMILLA-BOUCHÁN, Imelda, LUNA SOTO, Vladimir Loa 1179, Cd. Sucre. Chuquisaca, Bolivia last updated June 30, 2022.

The opinions expressed by the authors do not necessarily reflect the views of the editor of the publication.

It is strictly forbidden to reproduce any part of the contents and images of the publication without permission of the National Institute for the Defense of Competition and Protection of Intellectual Property.

Journal-Economic History

Definition of the Journal

Scientific Objectives

Support the international scientific community in its written production Science, Technology and Innovation in the Field of Social Sciences, in Subdisciplines of Macroeconomics and monetary economy: Growth and economic fluctuation; Financial markets and institutions; Labor and consumers, demography, education, income and wealth; Government, War, Law, and Regulation; Agriculture, natural resources, natural, natural environment and extractive industries; Manufacturing and construction; Transport, domestic and international trade, energy, technology and other services; Micro-Business History; Regional and urban history.

RINOE® is a Scientific and Technological Company in contribution to the Human Resource training focused on the continuity in the critical analysis of International Research and is attached to CONACYT-RENIICYT number 1702902, its commitment is to disseminate research and contributions of the International Scientific Community, academic institutions, agencies and entities of the public and private sectors and contribute to the linking of researchers who carry out scientific activities, technological developments and training of specialized human resources with governments, companies and social organizations.

Encourage the interlocution of the International Scientific Community with other Study Centers in Mexico and abroad and promote a wide incorporation of academics, specialists and researchers to the publication in Science Structures of Autonomous Universities - State Public Universities - Federal IES - Polytechnic Universities - Technological Universities - Federal Technological Institutes - Normal Schools - Decentralized Technological Institutes - Intercultural Universities - S & T Councils - CONACYT Research Centers.

Scope, Coverage and Audience

RINOE Journal-Economic History is a Journal edited by RINOE® in its Holding with repository in Bolivia, is a scientific publication arbitrated and indexed with semester periods. It supports a wide range of contents that are evaluated by academic peers by the Double-Blind method, around subjects related to the theory and practice of Macroeconomics and monetary economy: Growth and economic fluctuation; Financial markets and institutions; Labor and consumers, demography, education, income and wealth; Government, War, Law, and Regulation; Agriculture, natural resources, natural, natural environment and extractive industries; Manufacturing and construction; Transport, domestic and international trade, energy, technology and other services; Micro-Business History; Regional and urban history with diverse approaches and perspectives, That contribute to the diffusion of the development of Science Technology and Innovation that allow the arguments related to the decision making and influence in the formulation of international policies in the Field of Social Sciences. The editorial horizon of RINOE® extends beyond the academy and integrates other segments of research and analysis outside the scope, as long as they meet the requirements of rigorous argumentative and scientific, as well as addressing issues of general and current interest of the International Scientific Society.

Editorial Board

CUBÍAS-MEDINA, Ana Elizabeth. PhD
Universidad Carlos III de Madrid

FELDMAN, German. PhD
Johann Wolfgang Goethe Universität

ALIAGA - LORDEMANN, Francisco Javier. PhD
Universidad de Zaragoza

NIÑO - GUTIÉRREZ, Naú Silverio. PhD
Universidad de Alicante

CAMPOS - QUIROGA, Peter. PhD
Universidad Real y Pontifica de San Francisco Xavier de Chuquisaca

GUZMÁN - HURTADO, Juan Luis. PhD
Universidad de Santiago de Compostela

CHAPARRO, Germán Raúl. PhD
Universidad Nacional de Colombia

ARANCIBIA - VALVERDE, María Elena. PhD
Universidad San Francisco Xavier de Chuquisaca

BANERJEE, Bidisha. PhD
Amity University

HIRA, Anil. PhD
Claremont Graduate School

Arbitration Committee

GÓMEZ - CHIÑAS, Carlos. PhD
Instituto Politécnico Nacional

MANJARREZ - LÓPEZ, Juan Carlos. PhD
El Colegio de Tlaxcala

GARCÍA - ELIZALDE, Maribel. PhD
Universidad Nacional Autónoma de México

ÁVALOS - RODRÍGUEZ, María Liliana. PhD
Universidad Michoacana de San Nicolás de Hidalgo

CÓRDOVA - RANGEL, Arturo. PhD
Universidad Politécnica de Aguascalientes

VÁZQUEZ - OLARRA, Glafira. PhD
Universidad Michoacana de San Nicolás de Hidalgo

GUILLEN - MONDRAGÓN, Irene Juana. PhD
Universidad Autónoma Metropolitana

CANTO - MALDONADO, Jessica Alejandra. PhD
Universidad Autónoma de Yucatán

LÓPEZ - TORRES, María del Rosario. PhD
Universidad del Estado de Puebla

BUJARI - ALLI, Ali. PhD
Instituto Politécnico Nacional

MARTÍNEZ - CARREÑO, Beatriz. PhD
Benemérita Universidad Autónoma de Puebla

Assignment of Rights

The sending of an Article to Journal-Economic History emanates the commitment of the author not to submit it simultaneously to the consideration of other series publications for it must complement the Originality Format for its Article.

The authors sign the Format of Authorization for their Article to be disseminated by means that RINOE® In its Holding Bolivia considers pertinent for disclosure and diffusion of its Article its Rights of Work.

Declaration of Authorship

Indicate the Name of Author and Coauthors at most in the participation of the Article and indicate in extensive the Institutional Affiliation indicating the Department.

Identify the Name of Author and Coauthors at most with the CVU Scholarship Number-PNPC or SNI-CONACYT- Indicating the Researcher Level and their Google Scholar Profile to verify their Citation Level and H index.

Identify the Name of Author and Coauthors at most in the Science and Technology Profiles widely accepted by the International Scientific Community ORC ID - Researcher ID Thomson - arXiv Author ID - PubMed Author ID - Open ID respectively.

Indicate the contact for correspondence to the Author (Mail and Telephone) and indicate the Researcher who contributes as the first Author of the Article.

Plagiarism Detection

All Articles will be tested by plagiarism software PLAGSCAN if a plagiarism level is detected Positive will not be sent to arbitration and will be rescinded of the reception of the Article notifying the Authors responsible, claiming that academic plagiarism is criminalized in the Penal Code.

Arbitration Process

All Articles will be evaluated by academic peers by the Double Blind method, the Arbitration Approval is a requirement for the Editorial Board to make a final decision that will be final in all cases. MARVID® is a derivative brand of ECORFAN® specialized in providing the expert evaluators all of them with Doctorate degree and distinction of International Researchers in the respective Councils of Science and Technology the counterpart of CONACYT for the chapters of America-Europe-Asia- Africa and Oceania. The identification of the authorship should only appear on a first removable page, in order to ensure that the Arbitration process is anonymous and covers the following stages: Identification of the Journal with its author occupation rate - Identification of Authors and Coauthors - Detection of plagiarism PLAGSCAN - Review of Formats of Authorization and Originality-Allocation to the Editorial Board- Allocation of the pair of Expert Arbitrators-Notification of Arbitration -Declaration of observations to the Author-Verification of Article Modified for Editing-Publication.

Instructions for Scientific, Technological and Innovation Publication

Knowledge Area

The works must be unpublished and refer to topics of Macroeconomics and monetary economy: Growth and economic fluctuation; Financial markets and institutions; Labor and consumers, demography, education, income and wealth; Government, War, Law, and Regulation; Agriculture, natural resources, natural, natural environment and extractive industries; Manufacturing and construction; Transport, domestic and international trade, energy, technology and other services; Micro-Business History; Regional and urban history and other topics related to Social Sciences.

Presentation of the content

In the first article we present, *Gender historiography in Bolivia*, by ARANCIBIA, Maribel & CLAVIJO, Cadiz, with adscription in the Universidad Mayor, Real y Pontificia de San Francisco Xavier de Chuquisaca, in the next article we present, *Contributions to economic theory and the relevance of Mrs. Joan Robinson*, by PÁEZ, Jaime, with adscription in the Universidad Central, in the next article we present, *Adoption of the electronic medical record in Mexico: a review of the status*, by RAMOS-GONZÁLEZ, Javier, with adscription in the Universidad Iberoamericana, in the last article we present, *The proposed curriculum and timetable as part of the implementation of Law 070 on productive socio-community education and its impact on Bolivian education*, by BAILEY, Carla, RENDON, Alex and LEAÑO, Karla, with adscription in the Universidad Mayor Real y Pontificia de Francisco Xavier de Chuquisaca.

Content

	Article	Page
Gender historiography in Bolivia ARANCIBIA, Maribel & CLAVIJO, Cadiz <i>Universidad Mayor, Real y Pontificia de San Francisco Xavier de Chuquisaca</i>		1-8
Contributions to economic theory and the relevance of Mrs. Joan Robinson PÁEZ, Jaime <i>Universidad Central</i>		9-26
Adoption of the electronic medical record in Mexico: a review of the status RAMOS-GONZÁLEZ, Javier <i>Universidad Iberoamericana</i>		27-37
The proposed curriculum and timetable as part of the implementation of Law 070 on productive socio-community education and its impact on Bolivian education BAILEY, Carla, RENDON, Alex and LEAÑO, Karla <i>Universidad Mayor Real y Pontificia de San Francisco Xavier de Chuquisaca</i>		38-41

Gender historiography in Bolivia

Historiografía de género en Bolivia

ARANCIBIA, Maribel†* & CLAVIJO, Cadiz

Universidad Mayor, Real y Pontificia de San Francisco Xavier de Chuquisaca, Facultad de Ciencias Políticas y Sociales, Sucre, Bolivia.

ID 1st Author: *Maribel, Arancibia*

ID 1st Co-author: *Cadiz, Clavijo*

DOI: 10.35429/JEH.2022.10.6.1.8

Received January 10, 2022; Accepted June 30, 2022

Abstract

This article examines the construction of gender in Bolivia from the history of gender studies. Also rescues the contributions and studies of different authors with regard to gender in Bolivia, without neglecting the social historical context of the historiography of gender in Bolivia, to do a literature review was conducted from an analysis is performed taking into account the category of gender justice and thus make a contribution to the historiographical current that studies women in community.

Género, Contexto histórico, Bolivia

Resumen

Este artículo examina la construcción del género en Bolivia desde la historia de los estudios de género. Asimismo rescata los aportes y estudios de diferentes autores con respecto al género en Bolivia, sin dejar de lado el contexto histórico social de la historiografía de género en Bolivia, para ello se realizó una revisión bibliográfica a partir de un análisis que se realiza tomando en cuenta la categoría de justicia de género y de esta manera hacer un aporte a la corriente historiográfica que estudia a la mujer en comunidad.

Género, Contexto histórico, Bolivia

Citation: ARANCIBIA, Maribel & CLAVIJO, Cadiz. Gender historiography in Bolivia. Journal-Economic History. 2022. 6-10:1-8.

* Correspondence to the Author (E-mail: arancibiamaribel.a@gmail.com)

† Researcher contributing first author.

Introduction

The 20th century has been characterised by different social struggles in both Latin America and Bolivia, and among the social struggles, women's struggles can also be identified. For this reason, this article does not study outstanding women, but rather women as a collective.

The study will not be framed within a traditional historiography that only remembers heroine or celebrity women, because it does not study a single woman, nor does it take Bolivian women as a homogeneous group, but rather recognises that despite the fact that women live in common situations because they live in the same territory, there is a difference in class, culture and ethnicity, and therefore the demands of urban and rural women are different because some are mestizo, indigenous, pollera and so on. In this sense, women are studied collectively and not individually.

In order to understand the construction process of gender historiography in Bolivia, taking into account the meanings of gender, equality, equity and gender justice, the article is divided into four sections: The first section provides background information on gender studies in Latin America and Bolivia, the second section presents the historical and contextual issues in Latin America and Bolivia, the third section studies the construction of gender, taking into account the concepts of gender, sex differences, gender equality and gender justice, and the fourth section analyses the construction of gender historiography in Bolivia.

Background to gender studies

In recent years, gender studies have been carried out more intensively all over the world, but what interests us here are the studies carried out in Latin America and Bolivia:

Among the recent works there is extensive work since 2001, as there are several articles on the subject of gender. De Lucas (2011) "Women's human rights: advances and challenges", in this study the author addresses the issue of women's human rights, reviewing and reformulating the concept of human rights. Bouanzari (2011) "Gender perspective and human rights. Global equality from dialogue", carries out a sociological analysis of the situation of women in developing countries.

An article by Nobre and Viudes (2011) "Possibilities and limitations in the construction of equality in the solidarity economy", in which they analyse the presence of women in the various meeting spaces of the solidarity economy movement in Latin America. On the other hand, Guevara (2011) "Estrategias, retos y propuestas en la defensa de los derechos humanos desde una perspectiva de género. Las Mélicas", her article shows in detail the work of Las Mélicas, which is a feminist organisation that seeks to achieve the empowerment of women.

Boule (2011) "Dialogue with the Feminist Collective Semillas de Flora Tristán" in the article reflects the debate with the feminist collective Semillas de Flora Tristán, where she shows the feminisation of poverty, the institutionalisation of mobilisations and the impact of the activities of the aforementioned collective.

In Bolivia, the studies that have been carried out on the issue of gender are Apilániz (2011) "Mujeres construyendo ciudadanías en Bolivia", which addresses the problem of women's non-citizenship and the struggles against patriarchy.

Other more recent works are by Uriona (2012) "Las Jornadas de octubre: intercambio horizontes emancipatorios", which studies the different moments of women's struggle for emancipation. Gallardo's (2012) article "La urgencia de retomar la radicalidad", where she points out that thanks to collective actions, women have emancipated themselves from the tutelage of the state, the parties and the church.

Another author who wrote an article with a gender focus is Paredes (2012) "Las trampas del patriarcado" (The traps of patriarchy), where she points out that it is necessary to break out of the patriarchal logic of the power of financing and imposing hegemonies. In the same vein, Lugones (2012) "Subjetividad esclava, colonialidad de género, marginalidad y opresiones múltiples" (Slave subjectivity, gender coloniality, marginality and multiple oppressions) proposes a framework of decolonial feminism.

Huanca (2012) "La Lucha de las mujeres indígenas" (The struggle of indigenous women), whose object of study is indigenous women, indicates that indigenous women are strong and tireless. Another article that also refers to indigenous women is Irayigra (2012) "Caminando juntos alcanzaremos la victoria" (Walking together we will achieve victory), which shows the presence of indigenous women in all the historical events of mobilisation in Bolivia.

Pessah (2012) "Feminismo de colour y descolonización", her main contribution is to the history of black slave women. In the same vein Salguero (2012) "Feminismo de colores e interculturalidad", which also refers to black women.

Fries (2012) "Identifying the roots of oppression: women's human rights", points out that the 20th century had one of its greatest expressions in the women's movement and the struggle for their rights. Likewise, Zabala (2012) "Los objetivos de la lucha: de las cuotas hacia una política de la presencia", studies the decade of the 80's when democracy was recovered and women gained decision-making spaces. On the other hand, Cobo (2012) "Sociología del género y teorías feministas" (Sociology of gender and feminist theories), takes different theories and paradigms that refer to the issue of gender or women.

Historical and contextual issues

a) At the Latin American level

According to Molyneux (2010) the Latin American region has a long history in its struggle for citizenship and women's rights, dating back to the 19th century and reaching significant achievements in the 20th century.

The Latin American territory has been colonised by the Spanish, so that after independence the countries were founded according to religious, political and legal tradition, "colonial laws attributed different rights to men and women and imposed on women the obligation to serve and obey men, little changed after independence" [Molyneux, 2010: 188]. In this sense, the situation of women did not change at all, as women continued to be seen in the domestic sphere, looking after children and taking care of the household.

In the mid-19th century, with the arrival of liberalism and the ideas of modernism, there were changes in terms of government and justice. "Just as Latin American modernity, whether in its liberal, revolutionary or cooperative moments, included women selectively and far from what it would have been under equal conditions" [Molyneux, 2010: 189].

In the twentieth century, ideas about women's rights changed, as the twentieth century was characterised by a variety of struggles for women's rights.

The 20th century was characterised by a variety of social struggles, which is why it is convenient to contextualise the Latin American and Bolivian context in order to approach the women's movement. "(...) for much of the twentieth century, citizens' rights rested on deeply rooted notions of gender difference, which coincided with the socially asymmetrical positions occupied by sex" [Molyneux, 2010: 189].

On the other hand, she points out that the women's movement from the 1960s onwards began to demand not only that women's civil rights should be incorporated into modern society, but also that society should incorporate the feminine vision into the world.

It was especially in the 1970s that women's movements emerged, "it was during the transition that marked the end of the Latin American dictatorships at the end of the 1970s that progress was made in terms of women's rights" [Molyneux, 2004: 192].

From the 1970s onwards there were advances in terms of gender by feminist activists, "feminism itself diversified, and in the last decades of the 20th century, it gained more support for some of the ideas of working class women. It was not until the 1980s that respect for difference was included in feminist politics" [Molyneux, 2010: 193]. From the 1980s onwards, the formation of autonomous feminist groups towards exploited and oppressed sectors of women such as workers, peasants or urban women from popular sectors was characterised by a greater formation of autonomous feminist groups.

On the other hand, in these same years in Latin America, according to Molyneux (2010), work on the subject of gender increased, both theoretical and empirical, as these studies advanced together with the women's movements unleashed in those years.

b) At the national level

The Bolivian territory has suffered three centuries of Spanish colonialism just like other Latin American countries, as this condition marked racial differences, since the colonial system took root in Bolivian society, from language to religion.

According to Paredes (2012), colonisation has penetrated both men and women, which is why after Bolivia's independence, patriarchy has continued to be maintained. On the other hand, Huanca (2012) points out that colonialism comes with racism and patriarchy, education and religion are instruments of patriarchy, as they made women and indigenous peoples believe that they had to suffer.

According to Lugones (2012) the development of conquest, colony and capital became the quintessential Spanish project, as it introduced the racial dichotomy with regard to people, work, social practices, language and society itself. In this sense, women have gone through different stages in the history of Bolivia, in the colonial period, XVI, XVII and XVIII centuries and even in the republican period, XIX century, women were still occupied in domestic services, manufacturing and small trades according to the social class to which they belonged.

On the other hand, in the 20th century, as in other Latin American countries, women acquired a certain economic independence, they already had civil rights, they could organise themselves into trade unions, they had access to education and later to higher education for their professionalisation. "In the mid-twentieth century they were recognised as a collective subject, with a female identity under construction, loaded with diverse political sensibilities, depending on national, ethnic and religious cultures (...)" [Gallardo, 2012: 74].

The women's movement in Bolivia began in 1960, since, according to Gallardo (2012), feminists in the 1960s began to investigate the history of women with which to identify themselves that did not come from an alien definition, and they constructed their own methods and ways to regulate their being, participating and acting independently of men in all spheres of reality.

According to Gallardo (2012), this change in women's history shook the patriarchal sediments because feminists promoted an emancipatory process independent of the male collective, as they prefigured feminist autonomy as well as organisation through their way of doing politics. The transformations were most noticeable between 1980 and 2005, as peasant, indigenous and professional women managed to organise themselves with their respective identities around the demands and needs of each sector. All these changes were provoked by the different events that Bolivia went through.

The last few years have seen significant changes in terms of gender, as in 2012 forums were held to address and debate issues with a gender focus, organised by Conexión Fondo de Emancipación.

Towards a gender construction

a) Difference between sex and gender

Sex is a biological variable, determined from birth, and is therefore permanent and universal, since it "refers to the biological, manifest and generally permanent differences between men and women. It describes the biological, physical and genetic composition with which we are born" [Pinto, 2012 cit. in Martel, 2013: 15].

Gender is a socio-cultural construct, learned through socialisation and therefore varies over time and across cultures, it is changeable because it "refers to the set of qualities, roles (values, behaviours and activities) functions and responsibilities socially determined and assigned to people on the basis of their biological differences" [Martel, 2013: 15]. Gender is culturally and socially constructed, historical and changing.

If there is a difference between sex and gender, since gender varies over time and even within the same culture, since one learns to be a man and to be a woman, therefore masculine and feminine are not natural characteristics, because they are learned in the socialisation process.

b) Between gender equality and gender equity

Gender equality is not about people becoming equal, but that their rights and opportunities do not depend on whether they are born male or female, because:

- Being equal should not be confused with being identical. The problem is not in the difference, which is in itself natural, but in the unfair discrimination. Equality opens up a world of opportunities and experiences that traditionally belonged to one sex or the other. Equality is to build equal relations between the two sexes, with the same value, and different experiences and views [Domínguez, 2011 cit. in Martel, 2013: 19].

In gender equality both men and women should enjoy the same conditions and opportunities to develop their rights, the aspirations and needs of men and women should be considered, valued and promoted equally. In other words, gender equality implies the idea that all men and women are free to develop their personal capacities and make choices.

In order to achieve gender equality, gender equity needs to be understood as a principle and mode of action that seeks to compensate for disadvantages, "gender equity, understood as fairness in the treatment of men and women according to their respective needs, is the means to achieve gender equality" [Pinto, 2012 cit. in Martel, 2013: 20]. Therefore, equity is to compensate for the historical and social disadvantages between men and women that prevent them from equality in conditions.

Often when we hear the word gender, we think of women, but gender equality is not only a matter for women, but should rather concern and involve both men and women. Because in order to achieve gender equality, the equal involvement of men and women is required to eliminate the current power relations based on the subordination of women.

c) Gender justice

According to Molyneux (2010) the term gender justice implies a concept of justice that refers to the social and legal relations that prevail between the sexes. In this sense, the category of gender allows for an analysis of the relations between men and women, of the inequalities that exist between men and women that have been constructed in the social and family spheres.

The relations between men and women have arisen from a cultural type that has constituted fixed identities and roles, in this sense "gender justice can comprise diverse conceptions of justice, in an arc that goes from simple equality to concepts of differentiated equality [...] that equality continues to be a fundamental principle of justice" [Molyneux, 2010: 183]. On the other hand, she also says that gender justice in modern political language implies women's full citizenship.

For Martel (2012) gender justice aims to contribute to gender equality as well as to promote power sharing and its main outcome is the full, equal participation of men and women in all spheres of society, including participation in decision-making processes and access to power. It is known that there are privileges and spaces that men defend, but there are also opportunities and spaces for women to conquer.

Gender justice implies understanding and recognising equality between men and women as a human right, since "gender justice aims to contribute to gender equality, as well as to promote a redistribution of power. Its main outcome is the full and equal participation of men and women in all spheres of society, including participation in decision-making and access to power" [Martel, 2013: 22]. One cannot expect relations of subordination to change spontaneously and hope that justice for women will come without both men and women fighting and working for gender justice, because a major transformation cannot be achieved separately.

The recognition of human rights and the obligation to respect and fulfil them is in order to achieve gender justice, to understand that men and women have the same rights. In this sense, gender justice is not a struggle against men in order to displace them and take their place, reversing the relationship of power and subordination, but rather in favour of all men and women.

Analysis of gender historiography in Bolivia

Gender studies, whether they have a gender perspective or a gender approach, are expanding with each passing year. According to background data, both in Latin America and Bolivia, more articles have been written on gender issues, citizenship, empowerment, gender justice, participatory democracy and others, but from a gender perspective. As a result, there has been a change in the thinking of women intellectuals who are concerned about these issues.

According to the meaning of gender justice, it is important to refer to both men and women, since talking about gender is not synonymous with talking only about women, since gender justice encompasses society as a whole for a better life, in equality and equity between men and women.

On the other hand, a historiography of gender in Bolivia could not be carried out without thinking about Latin America, since no event is isolated, but rather is part of it, which is why it was important to know the social-historical contextualisation of the construction of gender, since it is clear that the subject of gender has been known since the 20th century.

The changes and struggles of the 20th century favoured the construction of a historiography of gender in Bolivia, since after having known the history of gender in Latin America and Bolivia, it can be said that its history has been marked by colonisation, since after the independence of the Latin American peoples, including Bolivia, they continued with the colonial system based on patriarchy.

Bolivia, after its liberation from the Spanish yoke in the 19th century, was still under the colonial patriarchal system, since patriarchy made women believe that they could only take care of household activities, take care of their children and be subject and subordinate to their husbands, which is why they could not even think of being part of public spaces, since these spaces were for men.

The 20th century was the century of struggles, women's struggles took place in Bolivia from the 1960s onwards, but were strongest between 1970-1980, when women's organisations emerged to fight against the dictatorships of those years. The results show that after democracy, women's organisations became more diverse, whether they were organised along political lines or by social sector.

According to the parameters used in the section on the construction of gender, the women's organisations and movements of the 1960s and 1970s have not yet defined what gender justice means, as the women's movements do not fight for civic participation, but rather for the rights of their children and families, and not for themselves.

But since the 1980s, specifically with the advent of democracy, women have been fighting for active participation in the different spheres of the state. The transformations were more noticeable from 1980 to 2005, as peasant, indigenous and professional women managed to organise themselves with their respective identities around the demands and needs of each sector. All these changes were provoked by the different events that Bolivia went through.

Between the years 2000-2005, women have had an active participation in social movements, as they were seen actively participating in social mobilisations.

All these aspects of Bolivian women and their dynamic participation in Bolivian history since the 20th century show the capacity and strength of Bolivian women, especially those women who were historically disadvantaged, such as indigenous women and women from popular urban sectors. The categories of equality, equity and gender justice are bearing fruit in Bolivia in the 21st century, since the most outstanding characteristics in recent years is the level of participation that women have achieved, since women today occupy important positions in the political and social sphere, have become leaders and occupy different positions, whether as women in the arts and literature, women in parliament, in the executive branch, or as councillors and mayors. This may be because lately Bolivian women, especially in the popular urban sectors, have been talking and training about equality, equity and gender justice.

All the achievements of women's empowerment in terms of local and national decision-making are due to women's performance in Bolivia's history, which opened up new spaces for participation.

Conclusions

Throughout history, women have been seen as companions and poor, which makes women subordinate, which is why they have had more disadvantages in terms of rights and the occupation of public spaces, but this does not mean that the issue of gender is only about women and for women, because if we want to talk about gender, we must necessarily talk about men and women.

Therefore, gender studies must take into account the interrelationship between men and women, and this must condition any gender analysis. All research or projects must be carried out from a gender perspective.

Carrying out a gender analysis, through an inclusive theory, is in favour of the whole of society, because from an analysis it is possible to implement projects that favour both men and women, gender justice also refers to the implementation of policies, supporting equal rights, demanding their fulfilment as men and women and in this way achieving gender equality.

Acknowledgements

To the Universidad Mayor, Real y Pontificia de San Francisco Xavier de Chuquisaca, to the Rector Ing.

Wálter Arízaga Cervantes.

References

Apilánz, Elena (2011). "Mujeres construyendo ciudadanías en Bolivia". (Re) pensar los Derechos humanos desde una perspectiva de género, núm. 13, pp. 43-64

Bouley, Catherine (2011). "Dialogo con el Colectivo Feminista Semillas de Flora Tristán". (Re) pensar los Derechos humanos desde una perspectiva de género, núm. 13, pp. 153-167

Bouyanzari, Yosra (2011). "Perspectiva de género y Derechos Humanos. Igualdad global desde el dialogo". (Re) pensar los Derechos humanos desde una perspectiva de género, núm. 13, pp. 31-42

Cabo, Rosa (2012). "Sociología de género y teoría feminista". Pensando los Feminismos en Bolivia. La Paz (1ra ed.)

De Lucas, Beatriz (2011). "Derechos Humanos de las mujeres. Avances y desafíos". (Re) pensar los Derechos humanos desde una perspectiva de género, núm. 13, pp. 15-30

Fries, Lorena (2012). "Identificando las raíces de la opresión: derechos humanos de las mujeres". Pensando los Feminismos en Bolivia. La Paz (1ra ed.)

Gallardo, Francesca (2012). "La urgencia de retomar nuestra radicalidad". Pensando los Feminismos en Bolivia. La Paz (1ra ed.)

Guevara, Sandra (2011). "Estrategias, retos y propuestas en la defensa de los derechos humanos desde una perspectiva de género. Las Méridas". (Re) pensar los Derechos humanos desde una perspectiva de género, núm. 13, pp. 123-152

Huanca, Esperanza (2012). "La lucha de las mujeres indígenas". Pensando los Feminismos en Bolivia. La Paz (1ra ed.)

Irayigra, Antonia (2012). "Caminando juntos alcanzaremos la victoria". Pensando los Feminismos en Bolivia. La Paz (1ra ed.)

Lugones, María (2012). "Subjetividad, esclava, colonialidad de género, marginalidad y opresiones múltiples". Pensando los Feminismos en Bolivia. La Paz (1ra ed.)

Martel, Fainne (2013). Formación Básica en Género. Lima: OXFAM (1ra edición)

Molyneux, Maxine (2010). Justicia de género, ciudadanía y diferencia en América Latina. Institute for the Studies of the Americas, Universidad de Londres

Nobre, Mirian y Viudes, Taís (2011). "Posibilidades y límites en la construcción de la igualdad de género en la economía solidaria". (Re) pensar los Derechos humanos desde una perspectiva de género, núm. 13, pp. 65-86

ARANCIBIA, Maribel & CLAVIJO, Cadiz. Gender historiography in Bolivia. Journal-Economic History. 2022

Paredes, Julieta (2012). “Las trampas del patriarcado”. Pensando los Feminismos en Bolivia. La Paz (1ra ed.)

Uriona, Pilar (2012). “Las jornadas de octubre: intercambiando horizontes emancipatorios”. Pensando los Feminismos en Bolivia. La Paz (1ra ed.)

Zabala, María Lourdes (2012). “Los objetivos de la lucha: de las cuotas hacia una política de la presencia”. Pensando los Feminismos en Bolivia. La Paz (1ra ed.).

Contributions to economic theory and the relevance of Mrs. Joan Robinson

Los aportes a la teoría económica y la vigencia de la señora Joan Robinson

PÁEZ, Jaime†*

Universidad Central, Departamento de Economía, Bolivia.

ID 1st Author: *Jaime, Páez*

DOI: 10.35429/JEH.2022.10.6.9.26

Received January 10, 2022; Accepted June 30, 2022

Abstract

Three important dates in the life of one of the most prominent Post-keynesian economists were commemorated in 2013, the 110th celebration of her birthday (October the 31st, 1903), 80 years since her masterpiece *The Economics of Imperfect Competition* (1933) was published and her death 30th anniversary (August the 5th, 1983). Mrs. Joan Robinson made great contributions to economic theory from a heterodox perspective, and with a wide social content. She was characterized by her interest in expanding the main macroeconomic issues to the problems of economic development and by a strong microfoundation towards imperfect competition market structures. This author bases her analyses in a significant amount of tools and interdisciplinary links, which may explain why her works are provided by deepness and analytical rigor in the history of economic thought. Robinson was concerned on debates about teaching of economics and the Neoclassical model.

Resumen

En 2013 se conmemoraron tres fechas importantes en la vida de una de las economistas poskeynesianas más destacadas, la celebración del 110° aniversario de su nacimiento (31 de octubre de 1903), los 80 años de la publicación de su obra maestra *The Economics of Imperfect Competition* (1933) y el 30° aniversario de su muerte (5 de agosto de 1983). Joan Robinson realizó grandes aportaciones a la teoría económica desde una perspectiva heterodoxa y de amplio contenido social. Se caracterizó por su interés en ampliar las principales cuestiones macroeconómicas a los problemas del desarrollo económico y por una fuerte microfundamentación hacia las estructuras de mercado de competencia imperfecta. Esta autora basa sus análisis en una importante cantidad de herramientas y vínculos interdisciplinarios, lo que puede explicar que sus obras estén dotadas de profundidad y rigor analítico en la historia del pensamiento económico. Robinson se preocupó por los debates sobre la enseñanza de la economía y el modelo neoclásico.

Economic development, Market, Neoclassical model

Desarrollo económico, Mercado, Modelo neoclásico

Citation: PÁEZ, Jaime. Contributions to economic theory and the relevance of Mrs. Joan Robinson. *Journal-Economic History*. 2022. 6-10:9-26.

* Correspondence to Author (E-mail: jpaezm1@ucentral.edu.co)

† Researcher contributing as first author

Introduction

"The purpose of studying economics is... to learn how to avoid being fooled by economists". Joan Robinson

This article aims to highlight the contributions of Joan Robinson to economic theory, not only in terms of her vision of the economic world, but also in terms of her methodological contributions, by generating a prolific economic literature characterised by a heterodox perspective with a broad social content, which handles the main macroeconomic concerns with an extension to the problems of economic development, supported by a strong micro-foundation based on the structures of economic structures.

The author bases her analysis on a significant number of interdisciplinary tools and similes, which explains why her works have been classified as the most profound and analytically rigorous in the history of economic thought. All this characterisation of Mrs. Robinson's production, later in her life, would be reflected in her constant concern for the teaching of economics and for relentlessly combating the theoretical scaffolding of the Neoclassical school.

Mrs. Robinson's name was Joan Violet Maurice, born on 31 October 1903 in Camberley, a small town in Surrey, thirty miles from London; her parents were Sir Frederick Barton Maurice and Lady Margarite. His great-grandfather, Frederick Denison Maurice, belonged to Christian Socialism, which had been concerned with issues of pauperism in the mid-19th century, for whom he is credited with his social concerns and his courageous attitudes in controversies with his opponents in debates on economic theory.

At the end of her early schooling at St. Paul's, Mrs. Robinson decided to study economics at Girton College, Cambridge. After completing her studies in economics at the age of twenty-two, she married Edward Austin Gossage Robinson, twenty-eight, also from Surrey and an economist, with whom she had two daughters Ann (1934) and Barbara (1937); she moved to India in 1926 where Austin had been engaged as tutor to the Maharaja of Gwailor.

There, for three years, Mrs Robinson gained her first real insight into economic underdevelopment and poverty, problems she would work on throughout her life in economics (Perez, 2010).

On returning to Cambridge in 1929, Joan Robinson worked as a tutor, supervising undergraduate students, while also beginning her research activities. By this time John Maynard Keynes was the editor of the Economic Journal and had brought to Cambridge the young economists Piero Sraffa and Richard Kahn, who were important in Joan Robinson's life.

In 1931 Keynes set up a group called the Cambridge Circus, made up of what were considered to be the most brilliant young economists of the day: Sraffa, Kahn, James Meade and Joan Robinson herself. In the same year, Robinson became an assistant professor, in 1937 an associate professor and in 1949 a full professor. Until 1965, she held the position of Professor at Girton University, a position she held until 1971. In 1979 she was the first woman to be awarded a Fellowship at King's College, and just four years later, on 5 August 1983, she died in Cambridge (Perez, 2010).

At a memorial service for Mrs Robinson held in King's College Chapel (29 October 1983), Ruth Cohen (a lifelong friend and Principal of Newnham College), said of Mrs Robinson: "Her work was original in many fields and her reputation as a leading economist has been known throughout the world for many decades. I think most of us would consider it outrageous that she was not awarded the Nobel Prize.... As an economist he accepted no theory as dogma and reconsidered accepted assumptions, those of the right of course, but also those of the left.... In the last years of her life she felt very depressed about the state of economic doctrine and struggled for a theory that would create models capable of taking into account history, ecological balances in individual communities and in particular technological change. He was trying to work out a different technique of thinking". (Feiwel, 1988) (1932), "A Parable on Savings and Investment" (*Economica*, 1933); "The Theory of Money and Analysis of output" (*Review of Economic Studies*, 1933); "What is perfect competition?" (*Quarterly Journal of Economics*, 1934) and "Euler's Theorem and the Problem of Distribution" (*Economic Journal*, 1934).

In 1933 he would also publish *Economics of Imperfect Competition*, his most successful work (For a broader view of Joan Robinson's work, see Annex No.2 of this document).

From 1936 onwards she began to write for the dissemination of Keynesian ideas, which remained with her throughout her life and constituted an important bulwark against attempts to absorb them into the main body of neoclassical orthodoxy, but she would not carry out such adherence uncritically, and indeed she did not even consider the Keynesian revolution to have been a great intellectual triumph.

Although it must be acknowledged that Mrs Robinson clearly established the differences between Keynes's original approaches and those of the Neoclassical Synthesis, whose representatives she called "bastard Keynesians". For example, when Keynes argued that a reduction in nominal wages would produce, in each of the independent variables of his interpretation of the economic system, adverse effects on the marginal propensity to consume, and on the marginal efficiency of capital and favourable, downward, effects on the rate of interest, Joan Robinson brings something important to bear on the issue: "the orthodox theory, which Keynes attacked, held that a reduction in money wage rates implied a reduction in real wages, and that a reduction in real wages would lead to an increase in employment. Keynes' argument was very different from the one that has since been inadequately elaborated by Keynesian bastards; for, according to them, money wage rates are rigid for institutional reasons.

Keynes' argument was based on the fact that, if during a depression wages were reduced, the situation would worsen because this would lead to a fall in prices and expectations of subsequent falls which would discourage investment; on the other hand, the fall in the monetary value of shares would reduce the availability of credit and put banks in danger of bankruptcy" (ROBINSON, *Economic Heresies*, 1976).

Joan Robinson read Marx with some interest but with a critical attitude and in 1942 published *Essay on Marxian Economics*, where she tried to rescue the purely economic and conceptual aspects of his work, endeavouring to show how the models of Marx and Keynes rest on the same basis, tracing in the models of imperfect competition a theory of distribution very similar to the Marxist one, defining herself as the "quintessential left Keynesian" (DE LA IGLESIA, 2007), integrating in her work elements taken from Keynes, Marx and Kalecki (who for her had put forward a more coherent version of the General Theory, by introducing imperfect competition into the analysis, thus constituting "a more authentic general theory than Keynes". From then on his main interest was to create a theory appropriate to the analysis of a dynamic economic problem. His contributions to the theory of capital and economic growth in the 1950s and 1960s were widely recognised. In *The Accumulation of Capital*, 1956, she attempted to extend Keynesian analysis to the long run.

Mrs Robinson can be considered as the antithesis of epistemological dogmatism, her method consisted of using theories to learn and explain, extracting what was necessary from them in order to reach the truth, taking into account that any of them leads to failure if followed blindly and always willing to listen to the opinion of the contrary as an enriching habit, a pragmatism that was reflected already in her early writings, where she advocated simplicity in method and common sense prevailed, which she always tried to impose with vigour. (Perez, 2010)

There are several significant methodological contributions by Mrs. Robinson, which can be summarised in the following expressions taken from Feiwel: "For this reason I would pay a lot of attention to method. I would insist on the distinction between an accounting identity, a statement of equilibrium conditions and a summary of econometric facts. I would try to destroy the admiration which students feel for formulae, not to induce a sceptical inclination towards intellectual nihilism but to form the habit of separating them into their elements and putting them together again with the ambiguities removed, and keeping them firmly in place as useful instruments for common sense, not as their substitutes..."

"Controversies which arise through the confrontation of contradictory conclusions can easily be settled by examining the arguments which led to them. Each side should clearly state the assumptions on which its argument is based; by mutual criticism they can reach agreement about the consequences of certain assumptions and so can meet in an amicable discussion about the evidence to be found to demonstrate which set of assumptions (if any) is relevant to the problem at hand. For this method to be successful both parties must use it. One party's effort to proceed in this way will be frustrated if the other party continues to reiterate its conclusions or insists that its own set of assumptions is the only one that can legitimately be formulated. Unfortunately most economic disputes derive from a confrontation of dogmas. The style of argument is that of theology, not science". (FEIWEL, 1988)

From another point of view, Professor Joan Robinson devotes a few pages to the teaching of economics in her *Critical Essays* (Robinson, 1988, pp. 117-122). She expresses her concern about the teaching of Indian students at Cambridge University.

He analyses the possible consequences of a supply and demand that is modelled in the classroom, but which may be paradoxical in the Indian reality when applied to a country so different from mid-twentieth century Britain (Robinson, *Teaching Economics*, 1988).

But his suggestions for the teaching of economic science, from the point of view of author management, methodological and thematic issues are illustrated by the following sentences: "We must get rid of logically contradictory concepts and theorems, such as the general equilibrium of supply and demand, the long-run production function, the marginal productivity of capital and the equilibrium size of firms.

Fluctuations in activity should not be thought of as starting from nothing, but as slow, overlapping changes in long-run productive capacity brought about by accumulation, technical change (including changes in the methods of operation of the labour force) and alterations in the composition of output. The interaction between the long-run and short-run consequences of technical innovations is a complicated issue that requires further study.

The evolution of business and trade union policy should be approached in the spirit of observing class and group behaviour in natural history. The analysis of international trade should be preceded by an investigation of the meaning of a "nation" in the relevant senses, something that is not as simple as previously believed. For the last twenty years I have tried to trace the confusions and fallacies of neo-classical doctrines.

Over the last twenty years I have tried to trace the confusions and fallacies of mainstream neo-classical doctrines to their origin in the neo-classicals' neglect of historical time in static equilibrium theory, and at the same time to find a more promising option in the classical tradition, revived by Sraffa, which flows from Ricardo to Marx, is diluted by Marshall and enriched by Keynes' and Kalecki's analysis of effective demand. For serious students I would take the bull by the horns and start from the beginning to examine various types of economic systems. Every society (except Robinson Crusoe's) has to have certain rules of the game to organise the production and distribution of output. Adam Smith, Ricardo, Marx, Marshall and Keynes would be treated in terms of the model of an economic system that each of them had in mind and the real problems that each of them tried to solve...

The theory of the relative prices of goods and would make production, accumulation and distribution, examined from the point of view of an economy taken as a whole, the main themes. Keynes' *General Theory* would then take its place as the short-run section of a truly general theory. Here the theory of prices emerges as an element of the theory of distribution, since the relation of prices to money wage rates in the industrial sector of an economy is one of the determinants of the distribution of output between workers and capitalists or the state, and the relation of agricultural prices to the prices of manufactures is a major determinant of the distribution between sectors of the economy...

He would treat markets and the laws of supply and demand not only in terms of an ideal equilibrium already attained, but also in terms of an ideal equilibrium already attained, but also in terms of an ideal equilibrium already attained.

Terms of an ideal equilibrium already achieved, but also in terms of the actual transactions with goods, with their tendency to develop spider web cycles and the violent shocks that are imparted from time to time to the communities that depend on them..... I would deal with welfare in human terms and teach the people how to deal with it.

In human terms and teach students not to look for 'preference surfaces' but for objective evidence of nutritional and health levels. (Feiwel, 1988).

Joan Robinson consistently criticised the teaching of producer theory, based on neoclassical production functions, attributing to them their limitations in explaining the real world and warning against their transmission and reproduction of this misconception over time. In this respect, he stated: "Moreover, the production function has been a powerful instrument of miseducation.

The student of economic theory is taught to write " $X=f(L, K)$ ", "L" being a quantity of labour, "K" a quantity of capital, and "X" a rate of commodity output. He is taught to assume that all workers are equal and to measure "L" in man-hours of labour; he is mentioned the existence of an index number problem as to the choice of a unit of output; and then he is urged to go on to the next problem in the hope that he will forget to ask in what units "K" is measured. Before he gets to ask it, he will already be a teacher and thus habits of lax thinking are passed on from generation to generation" (Robinson J., 1953).

Mrs. Joan Robinson's approach to the teaching of economics is of vital importance today, insofar as in recent times there have been a series of events in the academy, which have evidenced the reaction against the limitations of the mainstream associated with the teaching and application of the neoclassical model, to solve many of the economic problems that have become more acute today, such as unemployment, poverty, inequality in the distribution of income, concentration of wealth, among others.

uch resistance was expressed when a group of students from Harvard University wrote a letter in November 2011 in which they expressed their dissatisfaction with the topics addressed in the course Economics 10 directed by Professor Gregory Mankiw. Their main complaint revolved around the biased teaching of economic theories, as only "a certain - and limited - view of economics" was presented. This protest was that Mankiw's course uses few academic articles and gives priority to textbook-based teaching, which the students denounce as a source of perpetuating the non-discussion of alternative perspectives to the mainstream of the discipline, and which would even lead to the poor quality of learning about economic theories by neglecting debates about the strengths and weaknesses of the different models discussed in class. This last criticism is not new, but it has been central to discussions of undergraduate economics curricula around the world. These debates have revolved around the need for pluralism in the teaching of theories, in recognition of the coexistence of different paradigms that offer diverse paths of enquiry into the world's phenomena (Oeconomialiberalis, 2011).

Another important piece of evidence is that which occurred in France in 2000, where a movement emerged with a similar complaint and managed to take space in the main newspapers of that country, arguing that the curricula had a strong bias towards neoclassical theory, which was fundamentally ideological and not based on the superiority of this paradigm in relation to other alternatives. The French students stated that: "Among all the present approaches, we are generally presented with only one, which is supposed to explain everything according to a purely axiomatic procedure, as if it were the economic truth. We do not accept this dogmatism. We want a pluralism of explanations" (Cataño, 2004).

Similarly, several authors from different perspectives have been proposing changes in the teaching of economics. In Colombia, it was the renowned economist Lauchin Currie. At the time, he expressed his concern about the economics faculties and their merger with the areas of administration and engineering. The essential proposal was for teaching based on interdisciplinarity during the first semesters and he considered it necessary to have a chair in "economic science" for all degree programmes (Currie, 1965).

In the last two decades of the twentieth century in Colombia, economists such as Bejarano and Kalmanovitz, established interesting debates on the teaching of economics and, despite having some epistemological differences, they agreed on giving students an integral vision of economics, which would move away from the single and totalising view of the neoclassical school and surely influenced by the positions of Mrs. Robinson.

"Bejarano also criticised the fact that a sequence of introductions to neoclassical doctrines is followed by Microeconomics or a general economic history to study Ricardo and Marx, as if each were treated as the antecedent of a more complete system, so that the history of the theory is conceived here as the history of the error to the truth". The underlying conception was not that, but that the concrete of history and its relation to economics is more intelligible pedagogically than starting from very abstract assumptions to derive marginal productivities and general equilibrium as a great auction.

Several Anglo-Saxon texts follow this methodology for introductory courses (among others, those of Robert Heilbroner, Joan Robinson, Clement and Poole), which makes it easier to understand later on the nature of the abstractions used by neoclassical economics or many strands of contemporary macroeconomics. The important thing about this approach is that it relativises theories and prevents training people with the sole and exclusive knowledge of a particular school, for example as the Chicago School was taught in Chile". (Kalmanovitz, 1999)

In the same perspective, the renowned economist Celso Furtado highlights his concern in relation to his experience in Brazil. According to him, there is a need for economic training in accordance with the "reality" of each country; this means not importing "canned products" or theories that are ossified in the so-called developed world, but empty in the practice of Latin American countries. Even more important is what he says about the economist's operability: "Today, resources are much more abundant and there are more trained people, but, it seems, there is less possibility to innovate, to use one's imagination".

Paradoxically, it can be seen that there is less possibility of using the imagination in the economist's field of work: everything is more operational. So "could it be that our dearest colleagues who work in administrative departments, state and private institutions and in the financial sector, are lacking in imagination when applying a theory in a country like ours?"

On the other hand, Stiglitz refers to the responsibilities of economists and economic science with respect to economic crises. It is well known that economists did not predict the crisis, or if they did, they did not put in place the measures to tackle it. This author points out in his book "Free Fall" that he, among other economists, did give warnings of the bubble problem but the consensus climate of the dominant paradigm turned a deaf ear to them. In the aftermath of this crisis, and the implementation of clearly problematic economic measures, the result has been the discrediting of economists. It has even been said that economics has been an "arrogant science that has been defeated" for trying to see an almost idyllic scenario of economic profit that has been radically shattered. The clearest problem with economics today is its claim to universalisation, i.e. its attempt to make real equivalence between the reality of economic behaviour and the models applied by economists. In general, economics tries to offer mathematical models that claim to be universal. These models, in turn, are based on two premises: the existence of an archetypal economic agent and the rationality of his or her actions. The economic agent in question acts under certain conditions and economic theory considers that he or she always acts in the same way in the same context, and all of this in a rational and measurable way. As we have seen, this is not true because this agent does not always behave rationally and does not always act in the same way in the face of different stimuli and conditioning factors. Economic dynamics is also based on instability, irrationality and chance, elements that are not usually taken into account in these mathematical models proposed by the discipline. Nor are markets as efficient and balanced as these theories claim, so that the economy, as it is currently conceived, has important shortcomings (Stiglitz, 2010)

All this evidence converges with the statements of Mrs. Robinson who, in 1967, from Cambridge University, affirmed that economic theory did not offer sufficient arguments to explain underdevelopment, taking into account that the neoclassical theory to which she referred avoided addressing issues such as crises, unemployment, development and inflation, typical problems of unbalanced economies such as the underdeveloped ones.

Joan Robinson questioned the theory of equilibrium, on which the whole neoclassical scaffolding is built, as a valid reference to explain the reality of underdevelopment and its structural imbalances and that therefore, the teaching of economics based on this paradigm was misleading for students, to the extent that by relying on a strong formal support, with scientific pretensions, it concealed the real causes of the problems mentioned and therefore limited the formulation of adequate policies to approach their solution. (ROBINSON, *Economic Theory and Political Economy*, 1975).

In this respect, it is pertinent to introduce the excellent article by Professor Robinson, entitled "Dissertation in Oxford by a Cambridge economist", in which she begins her explanation by narrating how a neoclassical professor would teach his student the concept of equilibrium. As it is so illustrative, it is transcribed in its entirety. For this purpose, see Annex No. 1 of this document (ROBINSON J., 1976-a).

Approaching Joan Robinson's contributions from the micro and macroeconomic theory, it can be affirmed that from Sraffa's ideas, she decides to write about the theory of markets. In this way, she wrote and published "Imperfect competition and falling supply Price" (*Economic Journal*, 1932) and her masterpiece *Economics of Imperfect Competition* in 1933, which would place her at the forefront of theoretical and analytical advances, by developing her fruitful suggestion that the theory of value should be treated in terms of monopoly analysis. In this work, the starting point was the conception of the firm as a monopoly, but with the aim of extending the marginal technique to forms other than perfect competition, unifying the analysis of monopoly and perfect competition according to a single principle, which was an advance on the Marshallian approach, since the maximisation of monopoly net income that Marshall dealt with coincided with the criterion that profit was maximum if marginal cost and marginal revenue were equal, with the advance that this method could be used for both competition and monopoly. In this respect, it should be remembered that when Mrs. Robinson was a student she wrote the story of *Beauty and the Beast*, where she masterfully establishes a kind of parody of the Marshallian system from literature (ROBINSON, *Beauty and the Beast*, 1979).

The book, *The Economics of Imperfect Competition*, was intended to provide an operational and simple method so that the theoretical economist could "find answers to the practical problems posed by the real world", in this way Joan Robinson commented "I have prepared the toolbox that is my work, in the hope of helping him in his task". Thus, her technique of analysis, based on simplicity, starts from the fundamental hypothesis of rationality and consists of separating the elements of the situation that influence the individual's decisions into two parts, developing the theory of value on this basis. The main arguments of this book are built on a general relationship between mean values, marginal values, elasticities and the relationships between them, from which all equilibria can be studied.

This method is useful for the real world because obviously no economist can calculate the exact point of maximum net revenue, but if the conditions of supply and demand remain constant over a sufficiently long period of time he can find the value of the most profitable production simply by balancing Marginal Revenue and Marginal Costs and seeing whether selling a little more increases or decreases his net profits. (ROBINSON, *Economics of Imperfect Competition*, 1st ed., 1946.)

In short, Joan Robinson, in his book *Economics of Imperfect Competition*, generalises the development of a method of analysis based on the equality of Marginal Cost and Marginal Revenue and achieves it, building a gateway to extend the theory of supply and demand to real cases in a comfortable way, as well as facilitating the analysis by making it mathematically and geometrically accessible thanks to his "tools", which can be considered as a great merit.

Another of Joan Robinson's great contributions was the study of price discrimination, built on Pigouvian foundations and employing the same analysis he used for simple monopoly: the profit of the discriminating monopolist will be maximum when the marginal revenue of each market is equal to the marginal cost of total production. He also tackles the moral aspects, aware of the fact that "if discrimination were prohibited, more than one railway would not have been built and more than one village doctor would not have set up his office". (ROBINSON, *Economics of Imperfect Competition*, 2nd ed. 1973a)

Although he states that it is impossible to say whether discrimination is desirable or not from the point of view of society as a whole, in any case, comparing the situation with pure monopoly, he considers that "what is almost certain is that some degree of discrimination will be desirable" (ROBINSON, *Economics of Imperfect Competition*, 2nd ed., 1973a), specifically beneficial from a social point of view in cases where the price decrease affects poorer groups of individuals.

If the market is the market for labour, Joan Robinson identifies imperfections due to monopolistic conditions in the product market (what she called monopolistic exploitation) and market imperfections in the contracting of labour (monopsonistic exploitation). Thus, under conditions of imperfect competition the wage received by workers will coincide in equilibrium with the marginal revenue of the marginal product, as the marginal revenue is less than the price, and if under these conditions the marginal productivity of the factor does not change due to the advent of monopoly, the factors' remuneration decreases and becomes less than the value of their physical marginal product, which Joan Robinson identified as "monopolistic exploitation of labour".

In order to eliminate this exploitation, trade union action is necessary, an idea which Joan Robinson has always reaffirmed, and which has been pointed out as a continuation of J. S. Mill's defence of trade union activity: "the exercise of bargaining power against monopoly power raises real wages and increases employment" (ROBINSON, *The Second Monopoly of Labour*). (ROBINSON, *The Second Crisis of Economic Thought*, 1973c).

On the other hand, monopsony in the hiring of labour means that the average cost of hiring labour increases as the employment of this factor increases, if the profit-maximising entrepreneur hires factors up to the point where marginal cost and marginal revenue coincide. For Joan Robinson, pervasive market imperfections are the reason why labour is exploited as part of the structure of the economy, since monopoly is a rule and not an exception.

In the autumn of 1934 his article "What is perfect competition?" was published in the *Quarterly Journal of Economics*, where Joan Robinson defined perfect competition as "a situation in which the demand for the output of an individual seller is perfectly elastic". For perfect competition to exist, the market should be perfect and the number of firms should be large. For the market to be perfect "it is necessary, first, that all buyers are equal in their preferences and second, that at any particular time, each buyer has dealings with only one firm...".

When these conditions are met, an increase in the price demanded by any particular firm would bring about a complete cessation of its sales, provided that other prices remain unchanged. And this is the criterion for determining a perfect market" (ROBINSON, *Critical Essays*, 1st ed., 1984). With respect to the fact that the number of firms is large, it is concluded that the variation in price by one of them does not provoke a variation in the prices demanded by the others, but this does not depend on the number of firms, but on the slopes of the marginal cost curves of the rest of them, so it is impossible to discuss the number of firms necessary to ensure perfect competition, without discussing the marginal cost curves of those that make up the industry.

The smaller the slope, the smaller the decrease in price due to increases in output, and the greater the number of firms, the smaller the slope, but if marginal costs are increasing (conditions of perfect competition) it would be necessary for the number of firms to be infinite for competition to be absolutely perfect, so for Joan Robinson absolute perfection of competition is impossible.

In her theory of economic growth, Robinson's main point of reference is companies, which, with their drive, which she called the "essential animal spirit", are the initial and determining engine of the process of capital accumulation, a vital and dynamic element in the growth and economic development of countries.

This animal instinct is considered relevant to this process of growth and development, since it strengthens the impulse for investment; it gives rise to an optimistic vision of the future; it promotes the increase of scientific knowledge and its exploitation, i.e., its conversion into technical knowledge. Robinson also distinguishes three types of innovations attributable to the "essential spirit of mind": "autonomous" innovations, due to the improvement of knowledge; "competitive" innovations, caused by the struggle between firms; and "induced" innovations resulting from the shortage of workers.

In her theories of economic growth and development, largely decanted in her model of accumulation, Mrs Robinson used the simile of a metal age to represent the different scenarios in which countries can find themselves, in terms of their macroeconomic strengths and weaknesses; she uses the "golden age" as a methodological framework to represent intellectual experiments and to imagine a historical path (not necessarily of equilibrium) in which the rate of accumulation, the physically possible rate of growth and the boundary conditions were compatible with each other.

A golden age

"...I have used the phrase "a golden age" to describe a situation in which uniform and steady growth prevails in circumstances of full occupation.".... "...If the rate of

If the rate of accumulation is equal to the possible rate, made up of the rate of population growth and output per person, and starts at a level which is close to full employment and whose composition of plant stock is appropriate to the desired rate of accumulation, then a level is maintained which is very close to full employment, this situation is what I have called a "golden age" (ROBINSON, *Development Theory. Critical Aspects*, 1973b).

He concluded that a "golden age" indicates a utopian state of affairs which may not be found in a present economy, but which needed to be described to show how far capitalist economies are from tranquillity, lucidity and harmony. In conclusion, the golden age was the model of how the economy should be, a state of constant economic growth, which was always intended to be reached.

Despite the fact that the golden age was not the real situation, Robinson found that capitalism, in the midst of all its incoherence, had some coherence, since, developing in a situation of disequilibrium, it made the accumulation of capital, which is the determinant of economic growth, possible in the same way as in that age.

Taking this golden age as a basis, Robinson gradually makes adjustments to it; he moves some variables that were constant in that state to try to make it closer and closer to reality, i.e. he creates in that model ages lower than the golden age: "the deficient golden age", "the limited golden age", "the lead age", "the declining platinum age", "the slowly declining platinum age", "a false golden age", "a false platinum age".

In golden ages the initial conditions are appropriate to constant growth; and, in both true and restricted golden ages, the actual rate of decline that takes place is only constrained by the desired rate. (In a true golden age the possible rate coincides with the desired rate and a level very close to full employment has already been reached). In a restricted golden age, the realised growth rate is constrained by the possible rate and remains at the same low level. In a lead age the realised rate keeps the possible rate low. In a false golden age the possible rate is limited in a different way, i.e. because real wages are at the tolerable minimum. Both in a limited golden age and in a false golden age, the stock of capital available at any time is less than would be sufficient to provide employment for all available workers. In the limited golden age, the stock of capital goods does not grow faster because of a lack of "essential soul impulse"; and in the false golden age it does not grow faster because it is obstructed by the barrier of inflation.

Below is a table summarising the main characteristics of each of the metal ages used in Mrs. Robinson's explanation

Age	Characteristic
Golden age	Uniform and constant growth under full occupancy circumstances. The possible growth rate coincides with the desired rate.
Deficient golden age	Constant growth constrained by the desired rate, and remains at the same low level. The plant stock has the right composition to achieve the desired rate of accumulation, but this is not sufficient to employ the entire labor force.
Limited golden age	Constant growth constrained by the desired rate. With plants adequate to the desired rate of accumulation and full employment already achieved, full employment cannot be attained because the rate of growth of per capita output is not sufficient to make it possible.
Lead age	The possible growth rate keeps the realized growth rate low. An increasing proportion of unemployment means a decrease in the standard of living of the workers, restricting the rate of growth of the population, and in the absence of technical progress, the rate of growth of the labor force could be equalized with the rate of accumulation, the proportion of unemployment being large enough to keep the latter on an equal footing with the former.

Platinum age of accelerated growth	Initial conditions do not allow for steady growth and the rate of accumulation accelerates. A large number of unemployed workers are available, but it is not possible to achieve the desired rate of growth due to the lack of basic plants. Then the investor-seller phase is entered, increasing employment and the ratio of gross investment to output. Consequently, the rate of profit increases, decreasing the real wage rate, unless technical progress is sufficiently rapid.
Slow-growing platinum age	Initial conditions do not allow for steady growth and the rate of accumulation slows down. The proportion of the basic plant is too high for the physically possible rate of growth. Assuming technical stagnation, the growth of the labor force is not fast enough to match the volume of occupation offered by the increasing number of industrial plants. To repress the threat of labor shortage the rate of interest is raised and a brake is imposed on accumulation, lowering the rate of utility of accumulation.
False gold age	Constant growth constrained by the desired rate is constrained because wages are at a tolerable minimum. With inflationary pressures resulting in financial constraints and no labor shortage, if there is no reduction in the real wage, the higher the rate of accumulation the lower the real wage rate. When an increase in nominal wages due to price increases endangers the rate of accumulation.
Fake platinum age	As technical progress continues, the amount of labor required to produce an acceptable minimum real wage decreases. The constant level of real wages is compatible with the increase in the ratio of gross investment to consumption; therefore a rapid increase in accumulation can occur without causing inflation.

Table 1 Metal age

Source: Own elaboration, based on the article: *A model of accumulation by Joan Robinson in Postkeynesian Economics, Ocampo José Antonio (Robinson, A model of accumulation, 1985)*

For Robinson, the analysis of the acceleration principle, which indicates that an increase in income induces investment and, as long as it is accompanied by a corresponding increase in the natural resources exploited, an improvement in technology and an increase in the employed population, is compatible with the decision made by an entrepreneur to increase the rate of production of a commodity and the purpose of investing in working capital, is useful in the debate on economic growth. Robinson called this process "the steady progress model". As for the economic growth of a society in the long run, there are many related factors, but all agree that this is visualized as a process of accumulation of physical capital. In turn, the accumulation of this capital depends on the savings-investment process.

This process is what determines growth, since the causal relationships between savings, investment and growth operate at an aggregate level and with the accelerator principle, which transmits the effects of aggregate demand on investment and, therefore, amplifies the impact of investment on demand, thus generating a vicious circle: a higher level of investment generates more growth, which in turn induces an increase in investment, raises savings, and facilitates the financing of higher levels of investment, and so on.

All these contributions of Mrs. Robinson, mentioned in this text and surely many others that are not mentioned here, plus the evident relevance of this author, make her work even more vigorously recognized today, even if, undeservedly, she has never been awarded the Nobel Prize in Economics, Perhaps because her positions became a "stone in the shoe" for capital, to the extent that they questioned central and neuralgic aspects, especially for the development of poor countries, such as the limitations of capital accumulation, the inequitable distribution of income and the concentration of capital and wealth, among others. But it seems that Mrs. Robinson never needed these awards to achieve her accreditation and academic recognition. Surely, her position as an economist coincided with her position as a woman, "tremendously austere, a strict vegetarian, often dressed in Hindu clothes, wore sandals in winter and lived without heating in a small house surrounded by birds and squirrels." (Perez, 2010)

Annexes

Annex 1

Oxford lecture by a Cambridge economist

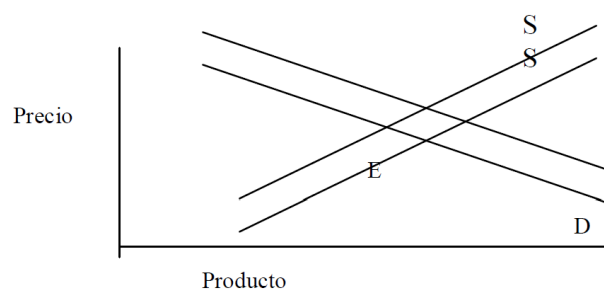
If some of you have been trotting around these parts for a long time, my talk will not please you too much. (For those of you who have not yet taken the plunge, it will suit you like a glove).

Since I am going to give an unpleasant lecture I will begin with an unpleasant joke told in Cambridge. These jokes are commonplace in Cambridge, and, making up for the pluses and minuses, as Marshall says, they are fairly even-handed, but uttered in isolation, among polite and courteous people, they seem in very bad taste.

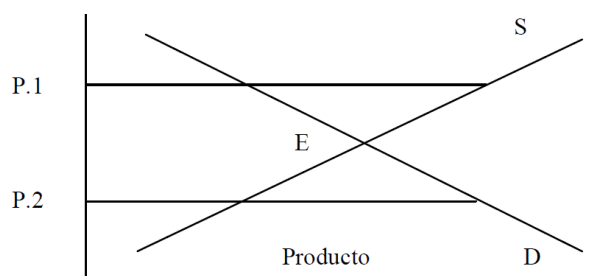
My unpleasant joke goes like this: when an Oxford economist comes to lecture in Cambridge he fills the blackboard with so many equations and diagrams that the audience gasps. I have come to Cambridge to blow them away with this diagram.

Imagine a professor explaining to a first-year student the meaning of equilibrium. The professor is a neoclassical economist. If you like that label, wear it; if you don't, I'll be the first to celebrate.

The professor tells the student: "E is the equilibrium point of supply and demand". And if the young man asks, "What does equilibrium of supply and demand mean?", he will answer: "It is point E". Admirable. You have offered the student a brief excerpt from an illustrated dictionary.



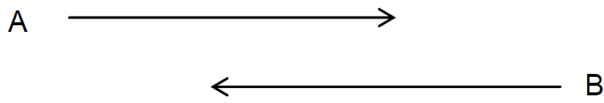
Or you can say:



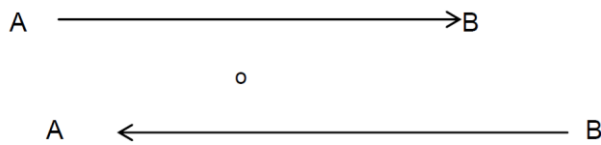
"When the price is OP1, supply is greater than demand and the price tends to fall. When it is OP2, demand is greater than supply, and the price tends to go up. The price may never really be in equilibrium, but it always tends toward the equilibrium point".

Now he's really missing the point. He is employing a space-based metaphor to explain a process that takes place over time.

Have you ever considered the difference between moving in space and moving in time? A and B are two points in space. If the bodies at A and B are not in equilibrium with each other, they will move simultaneously in both directions. Some of the A's will move toward B and some of the B's toward A, and they will cross each other in route.



In time there is a very rigorous one-way circulation. There can be a movement.



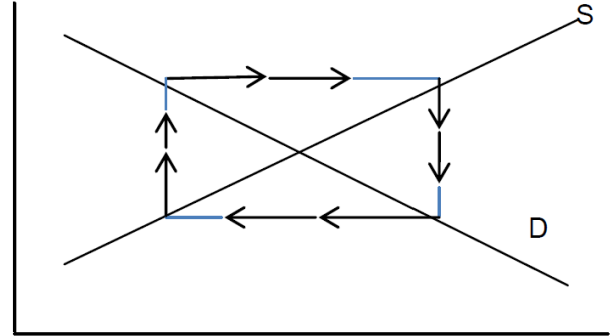
But not both at the same time.

The second characteristic of space is that there is nothing like it in this tending toward (which the first-year student considers extremely wrong, poor innocent). In time, our bodies will actually come into balance. Time can help with space problems. But we can take as much space as we want... How will it help us solve the problems of time?

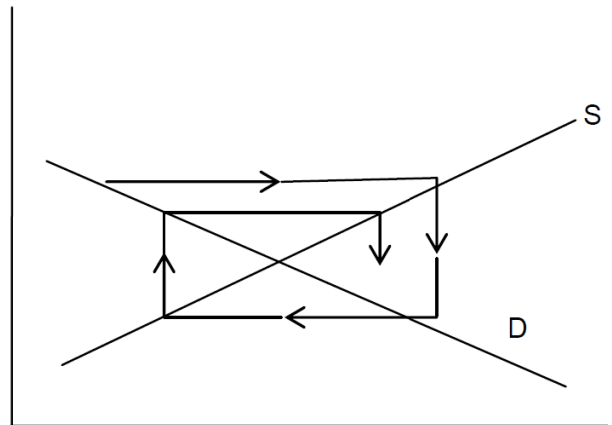
The third characteristic of space is that the distance from A to B is of the same order of magnitude as the distance from B to A. I don't say of the same magnitude because of trade winds and so on.

In time, the distance between today and yesterday is twenty-four hours when we go forward, and another eternity when it comes to going backward. There are many verses that speak of this, but the professor (who never personally knew Keynes) only reads poetry in the evenings, if at all, and would not think of mixing it with his work.

What does this remind you of? The pig cycle, the shipbuilding cycle and the economic cycle. Now, the professor starts to smile a little. It's not the first time you've heard about this.

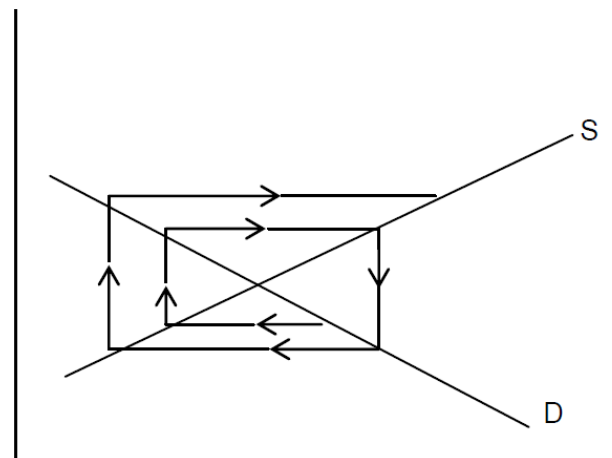


He has two cases. First he says, "Pigs are an exception. If I made a diagram for peanuts, there would be a problem today. We'd have a cycle that's damping down." Go ahead. I'm just asking for an arrow for each movement.



In the first phase, he doesn't seem to be on the wrong track. And in the second phase? His peanut stocks have been varying. In the second phase it would not be the same if you had started from a different point in the first phase. The stocks would have varied differently. The student cannot be expected to accept this kind of trend early in his career.

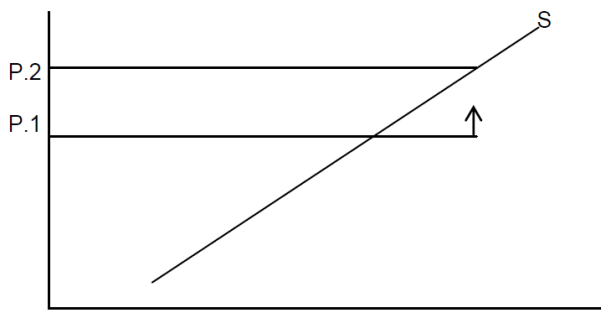
In the meantime the professor tries to get out of the way with his second answer. If the cycle is this way:



You get to infinity in a couple of weeks, which is a logical absurdity.

But now he is playing full-fledged on Keynesian ground. Even if every now and then he manages to throw a ball over the net, Samuelson, Kaldor or Kalecki finish off his play, and he fails to score a single goal. The Keynesians always have the upper hand.

Who in your opinion was the economist who best grasped the idea I am trying to explain with these arrows? Certainly not Keynes. Neoclassical economics smelled rotten to him and he threw it out the window, holding his nose while making really nasty remarks.



Under conditions of rigorously perfect competition, the short-run supply curve never decreases when demand grows steadily.

One jump upwards in time and we find ourselves in a position where the arrow does not create sideways problems, provided we do not move from the short run.

What did you do? The more economics I learn, the more I admire Marshall's intellect and the more I detest his character.

He laid out with great lucidity his short term for forward movements, and then proceeded to fill his book with tear gas, so that no one would notice that he had misrepresented all the rest of the approach. Read Marshall's principles again with a gas mask and you will agree with me.

When Keynes died, the professor pulled himself together a bit and began to read the General Theory carefully, discovering that it was full of terrible errors. (I will explain about the errors in a moment.) Who knew! The professor was so unprepared that he did not even know the first principle of Aristotelian logic. I reason like this: Keynes says I smell rotten.

Keynes makes logical errors, so I don't smell rotten. (The kind of logical errors made by Keynes were not of that order of magnitude).

Now I will explain the errors of the general theory.

The discussion process carries an arrow indicating the time. Here are assumptions A and there are conclusions C.



It is possible to start from A, think and arrive at conclusions. Or it is possible to start from C, think and arrive at the assumptions.

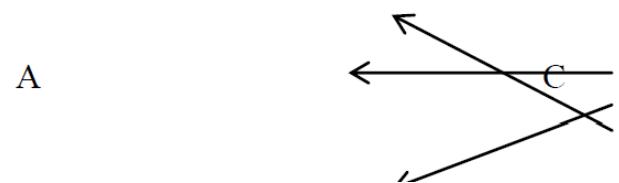
When the reasoning is correctly stated, it is in equilibrium:



Well, all the best. It will be here soon.

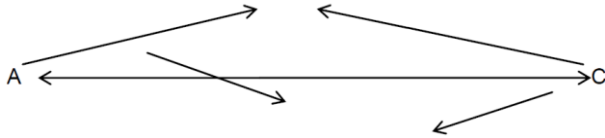
But tigers proceed in reverse. Don't ask me why. It's a fact I observed through my binoculars from a platform.

Galloping in a straight line from assumptions to conclusions is exactly what a horse can do, with a little horse sense and also his thoroughbred energy. But finding the straight path backwards is not at all easy, even for a tiger. The half-finished approach of a tiger can be summed up like this:



The treatise on money is a good example of what I mean, for it does not read as easily with Appendix H, and (in this context) does not bear as good fruit as Marshall's principles, considered globally. So, as far as I am concerned, don't bother. Just remember the headache that gripped us when we first read it.

The general theory of employment, interest and money can be represented as follows:



The equilibrium line is there, but Keynes did not take the trouble to erase all the other lines before publishing it. (You would be surprised how many lines were erased before R. F. Kahn allowed him to publish it. Keynes refers to it in a very gentlemanly way in the Preface).

Well, you see what I mean: when you do economics, don't forget your Blake.

Let us now turn to the long run. The short-run analysis starts from a fixed capital equipment specified in physical terms. There is no need to ask: When is capital not capital? There is a specific list of blast furnaces and rolling stock and other solid objects, and for Marshall a given number of fishing boats.

In the long run, capital equipment varies in quantity and in its design. Therefore, we run headlong into the problem: what is the amount of capital?

I don't want to have to tell you the length of books written on the subject lined up in a row.

We are getting to the really unpleasant point of this talk. All these books are nonsense, in the rigorous sense that Wittgenstein gives to the word: "What can be thought can be thought clearly. What can be expressed can be clearly expressed. What can be pointed out cannot be expressed."

Now this is particularly true in the case of capital. When it is possible to measure a quantity of capital, it can be measured accurately; and when it is a list of blast furnaces and other solid objects, it can be pointed out but cannot be expressed.

So, when you do economics, don't forget your Wittgenstein.

Let us apply the notion of equilibrium to capital. What determines the demand for capital goods? Its possible future quasi rents. What determines the supply price? Its past cost of production.

In the case of solid objects such as blast furnaces or rolling stock the demand is ex ante by its very nature, and the cost is ex post also by nature. The professor will not now be able to get away from the arrows indicating time.

Only in one case is it possible to measure, not to point out, the quantity of capital; that is when the economy as a whole is in equilibrium at our beloved point E.

Never speak of a system in the process of equilibrium, for equilibrium is meaningless unless one is already in it. But consider a system that is in equilibrium and has been so since the time of Adam; it will be profitable for you to follow this line:

Original sin ←—E—

So all the ex ante expectations about the present that were held in the past are being fulfilled in the present. And the current ex ante expectation is that the future will be the same as the past.

So it all adds up. Capital goods are sold today at a price that is at the same time their demand price, based on ex ante quasi rents, and their supply price, based on ex post costs.

Who came to understand this detail? Marshall understood it, in his own perverse way. If you reread his principles, you will notice that the more inconsistent the approach, the denser the cloud of tear gas. But the one who understood it, and moreover, who played fair, was Marx.

He begins to discuss accumulation on the basis of a model of simple reproduction, which is precisely E, in Marx's language. He then advances his model through history and demonstrates that he can never return to E before the day of judgment.

You will recall that Marshall managed to come up with the only case in which it is possible to say something sensible about the theory of market prices: the short-run supply curve under conditions of perfect competition. Who found the corresponding case in which something can be said about long-run development? Harrod, with his guaranteed growth rate (achieved by embellishing the arguments with neutral technical progress and a few other things).

Harrod was somewhat puzzled when I pointed out to him that his theory was contained in *Capital*, Volume II. But he is a conscious Keynesian and has long since thrown back the rotten fish he had eaten. So, past the first impression, he was absolutely right.

Anyway, the theory was published in his book. The guaranteed growth rate is not intended to show that the model is tending towards an equilibrium development path, but that (as Marx said) once it gets out of it, it will not be able to recover it until the day of reckoning.

It all comes down to respecting the rules of the game. Ricardo lays down these rules: embellish the assumptions as much as you like, but always state what you have done.

There is no need to comment on Marshall's way of proceeding. Marx, instead of politely saying, "If you will kindly pay attention to me, I will state my assumptions," falls on his knees and begs and implores us to believe his assumptions, because they constitute the secret of the universe. Although less morally reprehensible, the result is even more disconcerting than Marshall's tear gas. And Keynes often fails to cite a detail here or there because (how rashly) he considered that everyone would notice that it is self-evident.

Ricardo himself was too scrupulous. He resented having to juggle with assumptions. Until his death he was looking for the assumption that did not require juggling. And that ill-fated neoclassical professor took advantage of the vagueness engendered by Ricardo's scruples to imply that he meant the opposite of what he said. If you read Sraffa's *Introduction to the Principles* you will understand that I am not wrong.

Appendix 2

Main works by Joan Robinson
(In their original denominations)

Economics is a Serious Subject: An Economist's Apology to the Mathematician, the Scientist, and the Simple Man, 1932.

The economics of imperfect competition, 1933.

"*Theory of Money and Analysis of Production*," 1933, RES.

ISSN 2524-2059
RINOE® All rights reserved.

"A parable on saving and investment," 1933, *Economica*.

"What is perfect competition?". 1934, QJE.

"Euler's theorem and the problem of distribution," 1934, EJ.

"Unemployment in Disguise," 1936, EJ.

"The theory of long-run employment," 1936, ZfN.

"Some Reflections on Marxist Economics," 1932, EJ.

Introduction to the theory of employment", 1937.

Essays on the theory of employment, 1937.

"The Concept of Hoarding," 1938, EJ.

"The rise in the price of supply," 1941, *Economica*.

Essay on Marxian economics, 1942.

"The Economics of Full Employment," 1945, EJ.

"Obstacles to Full Employment", 1946, *Nationalökonomisk Tidskrift*.

"The Pure Theory of International Trade", 1946, RES.

"Marx and Keynes", 1948, *Critica Economica*.

"Mr. Harrod's Dynamics," 1949, EJ.

"Exchange Equilibrium", 1950, *Economia Internazionale*.

"The Rate of Interest", 1951, *Econometrica*.

Collected Economic Papers, Vol. I, 1951.

"The Model of an Expanding Economy", 1952, EJ.

- The Rate of Interest and other essays, 1952.
- "The Generalization of the General Theory," 1952,
- "The Production Function and the Theory of Capital," 1953-4, RES.
- The Accumulation of Capital, 1956.
- "Notes on the Theory of Economic Development", 1956, Annales de la Faculte de Liege.
- "India, 1955: Unemployment and planning", 1957, Capital.
- "The Philosophy of Prices", 1958, Manchester School.
- "The Real Wicksell Effect", 1958, EJ.
- "Some Problems of Definition and Measurement of Capital", Oxford EP.
- "Accumulation and the Production Function", 1959, EJ.
- Exercises in Economic Analysis, 1960.
- Collected Economic Papers, Volume II, 1960.
- "La Enseñanza de la Economía", Economic Weekly, 1960
- "General Liquidity", 1960, The Banker.
- "Own Rates of Interest", 1961, EJ.
- "Equilibrium Growth Models", 1961, AER.
- "Prelude to a Critique of Economic Theory", 1961, Oxford EP.
- Essays in the Theory of Economic Growth, 1962.
- "A Neo-Classical Theorem", 1962, RES. Economic Philosophy: An essay on the progress of economic thought, 1962.
- "The Basic Theory of Normal Price", 1962, QJE.
- "Solow on the Rate of Return", 1964, EJ.
- "Factor Prices Note Equalized", 1964, QJE.
- "The Final End of Laissez-Faire", 1964,
- "Consumer's Sovereignty in a Planned Economy", 1964, Essays in Honor of Oskar Lange.
- "China, 1963: The Communes", 1964, Political Quarterly.
- "Pre-Keynesian Theory after Keynes", 1964, Australian EP.
- Collected Economic Papers, Volume III, 1965.
- "Korea, 1964: Economic miracle", 1965, MLR.
- "Piero Sraffa and the Rate of Exploitation", 1965, New Left Review. Economics: An awkward corner, 1966.
- "Comment on Samuelson and Modigliani", 1966, RES.
- "The Badly Behaved Production Function", with K.A. Naqvi, 1967 QJE.
- "Growth and the Theory of Distribution", 1967, Annals of Public and Cooperative Economy.
- "Marginal Productivity", 1967, Indian Economic Review.
- "The Poverty of Nations", 1968, Cambridge Quarterly.
- "The Theory of Value Reconsidered", 1969, Australian EP.
- "A Further Note", 1969, RES.
- "Capital Theory Up to Date", 1970, Canadian JE. Freedom and Necessity, 1970.
- "Harrod After 21 Years", 1970, EJ. Economic Heresies: Some old-fashioned questions in economic theory, 1971 .

"The Second Crisis of Economic Theory", 1972, AER.

An Introduction to Modern Economics, with John Eatwell, 1973.

"Formalistic Marxism and Ecology without Classes", 1973, Journal of Contemporary Asia.

"Ideology and Analysis", 1973, in Sozialismus, Geschichte und Wirtschaft. Collected Economic Papers, Vol. IV, 1973.

"History versus Equilibrium", 1974, Thames Papers in PE.

"The Unimportance of Reswitching", 1975, QJE.

"What Are the Questions?", 1977, JEL.

"Employment and the Choice of Technique", 1977, Society and Change.

"The Labour Theory of Value", 1977, MLR. Contributions to Modern Economics, 1978.

"Keynes and Ricardo", 1978, JPKE.

"Morality and Economics", 1978, Challenge. The Generalization of the General Theory and Other Essays, 1979.

"Kalecki and the Economics of Capitalism", 1977, Oxford Bulletin of Statistics.

"Thinking About Thinking", 1979,

"Keynes Today", with F. Cripps, 1979, JPKE. Aspects of Development and Underdevelopment, 1979.

"Garegnani on Effective Demand", 1979, Cambridge JE. What Are the Questions? And other essays, 1980. Collected Economic Papers, six volumes, 1951-1980.

"Misunderstandings in the Theory of Production", 1982, in Feiwel, editor, Samuelson and Modern Economics.

"The Arms Race", 1982, in McMurrin, editor, Tanner Lectures on Human Values.

"The Economics of Destruction", 1983, MLR.

"The Theory of Normal Prices and Reconstruction of Price Theory", 1985, in Feiwel, editor, Issues in Contemporary Macroeconomics.

"Ideology and Logic", with F. Wilkinson, 1985, in Vicarelli, editor, Keynes's Relevance Today. Retrieved from: <http://www.eumed.net/coursecon/economistas/robinson.htm>

References

Cataño, J. (2004). La ciencia económica actual y la enseñanza de la economía: el debate francés. *Lecturas de economía*, 125.

Currie, L. (1965). La enseñanza de la economía en Colombia. Bogotá: Tercer Mundo.

De la Iglesia, C. (2007). Joan Robinson: Keynesiana de izquierdas. En L. y. Perdices, *Mujeres economistas*. Madrid: Ecobook.

Feiwel, G. (1988). El legado intelectual de Joan Robinson. *Trimestre Económico*.

Furtado, C. (1999). El capitalismo global. México: Fondo de Cultura Económica.

Kalmanovitz, S. (1999). El debate debe continuar: Bejarano y la enseñanza de la economía.

Cuadernos de Economía No. 31-Universidad Nacional de Colombia.

Oeconomialiberalis. (2011). La enseñanza de la economía al ruedo. pag- web.

Perez, B. (2010). Joan Robinson: Las aportaciones a la teoría de los mercados de una joven economista en el Cambridge Circus. *Mujeres y Economía*.

Robinson J. (1953). The Production Function and Theory of Capital. *Review of Economic Studies*, vol XXI.

Robinson J. (1976-a). Disertación en Oxford por un economista de Cambridge. En R. J., *Relevancia de la teoría económica* (págs. 337-347). Barcelona: Ediciones Matinez Roca, S.A.

Robinson, J. (1946). *Economía de la competencia imperfecta*, 1a.edic. Madrid: Aguilar.

Robinson, J. (1973a). *Economía de la competencia imperfecta*, 2a, edic. Barcelona: Martinez Roca.

Robinson, J. (1973b). *Teoría del desarrollo. Aspectos críticos*. Barcelona: Martinez Roca.

Robinson, J. (1973c). *La segunda crisis del pensamiento económico*. Madrid: Actual.

Robinson, J. (1975). *Teoría económica y Economía política*. Barcelona: Martinez Roca.

Robinson, J. (1976). *Herejías Económicas*. Barcelona: Ariel.

Robinson, J. (1979). *La bella y la bestia*. En J. ROBINSON, *Economía de mercado vs. Economía planificada*. Madrid: Martinez Roca.

104

Robinson, J. (1984). *Ensayos críticos*, 1a. edic. Barcelona: Orbis.

Robinson, J. (1985). *Un modelo de acumulación*. En J. OCAMPO, *Economía Postkeynesiana*.

México: Fondo de Cultura Económica.

Robinson, J. (1988). *Enseñanza de la economía*. En J. ROBINSON, *Ensayos críticos*. Barcelona:

Orbis.

Stiglitz, J. (2010). *Caida libre: el libre mercado y el hundimiento del capitalismo global*. Madrid:

Taurus.

Adoption of the electronic medical record in Mexico: a review of the status**Adopción del expediente clínico electrónico en México: revisión del estado actual**

RAMOS-GONZÁLEZ, Javier†

ID 1st Author: *Javier, Ramos-González**Universidad Iberoamericana, México.*

DOI: 10.35429/JEH.2022.10.6.27.37

Received January 20, 2022; Accepted June 30, 2022

Abstract

I present a brief review of the actual status in the adoption of Electronic Health Record in Mexico. I reviewed investigation articles and official information from the main health institutions and federal regulation. I describe the experience of the main health institutions and the structure of the regulation, remarking the lack of specific definitions and a clear nationwide strategy to allow the focus of the different efforts. I present also a new public and private partnership (PPP) focus for the investment on new health institutions that is currently the most solid effort in the adoption of the EHR as an integrated system.

Electronic health record, Health, PPP**Resumen**

Presento una breve revisión del estado actual en la adopción del Expediente Clínico Electrónico en México. Revisé artículos de investigación e información oficial de las principales instituciones de salud y de la regulación federal. Describo la experiencia de las principales instituciones de salud y la estructura de la regulación, destacando la falta de definiciones específicas y de una estrategia clara a nivel nacional que permita focalizar los diferentes esfuerzos. Presento también un nuevo enfoque de asociación público-privada (APP) para la inversión en nuevas instituciones de salud que es actualmente el esfuerzo más sólido en la adopción de la HCE como un sistema integrado.

Expediente clínico electrónico, Salud, APP

Citation: RAMOS-GONZÁLEZ, Javier. Adoption of the electronic medical record in Mexico: a review of the status. Journal-Economic History. 2022. 6-10:27-37.

† Researcher contributing as first author.

Introduction

This document aims to provide a brief review of the current status of the implementation of the Electronic Health Record in Mexico, using information from various research articles and official information.

From various research articles and official information, a brief outline of the main benefits, the existing experience in the main Mexican health the main benefits, the existing experience in the main health institutions in the country and the existing the existing regulation for the use of the electronic health record and the requirement for interoperability. interoperability requirement.

Definition of HER

An electronic health record (EHR) is the electronic collection of information concerning the health status of a patient or patient's the health status of a patient or population. Currently an ECE brings together information of information from different domains of the patient, including clinical, administrative, demographic, medical history demographic, medical history, allergies, medication, test results and patient account.

Patient's account

The ECE is designed to accurately report the patient's current status at all times, allowing it to be consulted and updated by different medical personnel requiring access, which helps to keep it up to date from different points of view of patient care. The ECE resource is conceived as an interoperable tool that can integrate medical information from other systems such as interpreted clinical imaging results, laboratory studies or real-time information on the patient's vital signs.

An ECE is organised through modules that allow different functionalities of operation, control and registration of clinical activity for the patient. In Mexico, the NOM-024-SSA3-2012 -Electronic Health Record Information Systems¹ is used, which establishes the main functionalities of the ECE.

Pillars and Modules of an ECE:

Medical Care: Focused on clinical records made during the interaction with the patient.

Administration and Results Ordering: Management of requests for medicines, studies and diagnostic aids, as well as the corresponding flow of verification, request and delivery of results in real time.

Administrative Management: Management of consents, support for the communication of clinical documents.

Clinical Management: Management of patient history, list of allergies, adverse reactions, current medication, inclusion of external clinical information.

Health Prevention: Management of preventive care campaigns and alerts.

Public Health: Management of public health notifications.

Decision Support: Inclusion of clinical practice guidelines, protocols, supporting documents. Management of referral information and pattern identification.

Technological Infrastructure: Focus on standard information management with adequate levels of security to allow information exchange between different departments.

Medical Informatics and Terminology Standards: Inclusion of internationally accepted standard terminology such as LOINC, ICD-9 and ICD-10.

Interoperability Platform: Inclusion of standards for information exchange such as HL7.

Security: Handling of authentication and electronic identification through profiles, control of access to information according to profile, logging of audit trails, interoperability with state information systems.

Decision Support: Focused on the registration and control of information that improves decision-making processes at different levels.

Clinical Management: Patient registration, management of mandatory biostatistics reporting.

Administrative Management: Clinical staff directory, organisation of human and material resources for emergencies.

Public Health: Reporting, monitoring and analysis of statistics.

Benefits

The benefits that are generally associated with an ECE have been widely discussed in different countries and studies, just as an ECE encompasses all areas of a hospital that relate to patient care and the benefits comprise a wide variety of situations, in general we can cite benefits from the following points of view:

- Improved quality of patient care

The most controversial so far is the improvement of quality in patient care, given that quality in the context of health care is understood as the recovery of health with the lowest possible risk of complications with the best cost-benefit ratio and the highest patient satisfaction [1], it is very complicated to evaluate it and subsequently link the results of the study to the correct use of an ECE that has the minimum necessary modules to allow the development of the medical practice related to the study. On the same subject, there have been efforts to measure quality based on a specific treatment, where quality measurement indicators have been defined and obtained through the use of the electronic clinical record, where the information was not totally reliable, but the result was congruent with the current situation in the country. [2]

- Improving waiting times for care

In the area of time improvement, the mechanics of the initial introduction of an ECE, as with any system, implies a learning curve that will cause an increase in time and effort, mainly on the part of clinical staff [3].

- Better control of supplies in health care

Thanks to the introduction of electronic prescribing and inventory control as unidosis, ECE allows a detailed record throughout the entire supply process until delivery to the patient, thus allowing tracking of any problems and reducing overuse of medicines.

- Reduced study turnaround times

Given the premise of interoperability, the ECE integrates with other systems surrounding patient care, such as vital sign monitors, imaging studies and laboratory studies. By integrating through an ECE, the request and delivery of results is done through the ECE, allowing the results of studies to reach the appropriate clinical staff immediately. In the case of imaging, it is possible to define whether the images should be available for consultation from the moment they are taken or until they are interpreted by a technician. It should be noted that this process avoids printing images, as the entire cycle is handled digitally.

- Improving hospital processes by centralising the functionality in the file

Similar to the studies, the ECE is responsible for grouping all the care around the patient, presenting a single view for all clinical staff involved and thus avoiding loss of information or duplication. The ECE allows all staff to have up-to-date information and to be aware of the patient's current status, as well as their studies, medications, history, surgical schedules, etc. This allows the care to have a continuous flow through different departments.

- Time reduction in the collection of hospital statistics

As defined by NOM-024 in its decision support section and public safety chapter, it has all the clinical and administrative information that allows the integration of statistical reports.

From the key operation of a hospital to epidemiological surveillance, they are of course two very different sides of the same functionality, so there must be different people in charge, but the ECE has the capacity to integrate the information of all patients and their care process.

- Availability of clinical records between different institutions through interoperability

At the regional and national level this is the greatest benefit associated with an EHR, as it has implications for the health care process that support universal health coverage and are of particular interest to the federal health ministry. On this issue, many countries have tried to generate a national scheme that allows patients to be seen in any hospital without the need to lose all their medical records, but this is the most complicated goal, as countries with a high degree of technological integration, such as the USA, which started its ECE process in 2004, have a high degree of technological integration. which began its EHR migration process in 2004, estimates that it will take until 2024 to consolidate a nationally interoperable health system [3]. As another example, Canada began a similar effort in 2001 by promoting national funding and policies for the establishment of a nationally interoperable EHR structure, but by 2011 only 36% of physicians were using a medical record, lagging behind the US, which had begun three years later [4].

- Reducing costs by eliminating complexity and duplication

As with all system implementations, the adoption of an ECE involves rethinking the way some of the most important processes work in a hospital, both clinical and administrative, and represents a valuable opportunity to improve processes by simplifying them through the use of ECE. In addition to process simplification, an ECE that has integrated patient safety issues such as referrals to care protocols, contraindication alerts

In addition to process simplification, an EHR that has integrated patient safety with topics such as referrals to care protocols, contraindication alerts and drug reactions can lead to cost reductions in patient care.

This benefit turns out to be one of the most expected and complicated to obtain, as a study of the total cost of ownership for each system is necessary, taking into account that not all hospitals have the infrastructure and specialised personnel to maintain an ECE.

Eastough comments that in the US, productivity improvements are typically expected to be seen within 2 years of implementation and cost savings up to the point of return on investment between 5 and 7 years after implementation [5].

- Improved patient safety

As mentioned in previous points, an ECE is involved in the whole cycle of patient interaction, and for this reason it can include functionality to ensure that patient safety is taken care of, a basic topic covered is patient identification, an ECE can rely on barcode scanning of patient wristbands to meet this objective but there is also much more complex functionality such as identification of contraindications to medications prescribed by a physician and modules to document adverse events, reminders for medication intake and inclusion of instructions for special care and studies. [5]

In Mexico, as we can see in the definition of modules according to the SSA, results are sought in several of the expected benefits of an ECE, in a quick analysis we can associate the chapters with the expected benefits for each one:

Medical care: improvement of quality, better control of inputs, reduction of times.

Technological infrastructure: Availability of the file through interoperability, reduction of time in the delivery of studies.

Decision support: Improved time and quality of hospital statistics, improved processes.

Apart from the benefits reported in the integration of information and improvement of processes, there are studies that link the quality of care through the adequate follow-up of the defined processes and the quality in the filling out of the documents present in the Hospital, and it is here where the definition of an ECE as a tool for the integral control of processes and quality gains great strength. In a study of 18 hospitals in Guadalajara, it was found that the lack of standardisation of processes and the presence of a deficient information system was identified in 22% of cases as inhibiting quality, as well as deficient completion of clinical records in 33% of cases [6].

Regulation

As mentioned above, the applicable regulation in Mexico is NOM-024-SSA3-2012, which is mandatory; the structure of the standard defines that separate guidelines and formats for health information exchange will be created. Previously, NOM-024-SSA3-2010 defined sections, chapters and indexes where each index describes the minimum functionalities that an ECE must comply with; it also contained a normative appendix with standard information catalogues, which are the minimum fields that must be collected in an ECE for each type of object.

For the 2012 update, all the expected functionality definitions were removed and this task was directed to the guidelines and formats that would later be defined by the DGIS.

NOM-024 seeks to standardise the structure of an ECE to ease the way for interoperability between different institutions.

To interoperability between different institutions while at the same time seeking to cover key cover key functionality and bring existing systems closer to different government programmes.

Below is a table showing the structure of NOM-024-SSA3-2010

Section	Chapter	Index	Functional
Normative appendix B	Catalogs	B	Catalogs
	Objects	A	Fields
Medical care Technological infrastructure	Management of orders and results	1.1	Administration of orders and medications
			Referral and results management
			Management of requests, referrals and results for diagnostic or treatment support units
			Administer patient medication management
			Manage diagnostic and treatment profiles.
			Generate requests for patient care
			Request for blood and blood products
			Request for diagnostic aids

Administrative management	1.2	Consents and authorizations
		Clinical workflow of case management
Clinical management	1.3	Clinical communication support
		Management of a patient's patient demographics
		Medication list management
		Manage allergy and adverse reaction lists
		Manage problem lists
		Manage summary lists
		Capture, manage and review clinical information
		Record external clinical documents.
		Recording, updating and managing patient medical records.
Health prevention	1.4	Notifications and reminders of preventive and wellness services.
		Provide alerts for preventive and preventive and wellness services.
		Health care support: preventive care and wellness.
Public health	1.5	Notification and response support
		Public health support
		Support for monitoring and response tracking of individual patient health notifications
Decision support	1.6	Manage clinical information to facilitate decision decision support
		Generate and store patient-specific instructions.
		Orders, referrals, results and care management
		Health care plans, clinical guidelines guidelines and protocols
		Care plans, clinical guidelines and protocols
		Knowledge access support

			Support of standardized clinical assessments support
			Support for identification of potential problems and patterns
			Support in the administration of medications and immunizations
			Support for patient assessments patient assessments in a variety of contexts
	Medical informatics and terminology standards	3.1	Medical informatics and terminology terminology
			Health informatics maintenance maintenance
			Mapping of local terminologies, codes and formats
	Interoperability interoperability platform	3.2	Information exchange standards information exchange standards
			Interoperability based on standards
	Security	3.3	Authentication
			Entity authorization
			Confidentiality and patient privacy patient
			Consultation of information in the electronic medical record information
			Access control Secure data exchange
			Interoperability of State, National and State, National and Institutional
			Audit trails
			Ratification of information
			Secure Routing of Information Between authorized entities
			Synchronization

Decision support	Administrative management	2.2	Health personnel directory
			Availability of health resources availability of material and human material and human resources for emergency emergency situations
			Maintenance of decision decision support functions
	Clinical management	2.2	Patient directory Health care episodes
			Notification to national registries and special mandatory reporting registries
			Patient relationship with family members and contacts
	Public health	2.3	Report generation
			Measurements, monitoring and analysis

Table 1 NOM024-SSA3-2010

There are still many problems regarding the use of the ECE in Mexico, this norm represents the first step towards the standardization of the information and modules managed in an ECE, however, it still lacks the necessary guides and formats to establish a specific frame of reference.

According to the NOM in its index 6.1.4 specifies that —The Guides and Formats specify the details of the exchange of information between Health Service Providers [7] in its index 6.1.5 establishes the DGIS as responsible for its development —The elaboration and updating of the Guides and Formats is coordinated by the Secretariat in its capacity as coordinator of the SNS, through the DGIS, through of the procedure published by the Secretariat for this purpose” [7] however, when reviewing the DGIS page, only two guides have been published [8]:

Reference Architecture: In this document, the DGIS refers to the most used standards in the industry regarding interoperability and communication profiles between health information systems, so it does not specify a standard architecture customized to the operation of the country's institutions, leaving the system architecture to be used at the discretion of each institution and therefore does not establish a minimum framework that supports interoperability. The document quotes in its statements:

The information, diagrams, bibliography and other references contained in this document are the property of their respective owners. This document is only a reference to each one of them, to have access and to be able to make use of them, the provisions, guidelines, costs and/or procedures for their acquisition must be observed directly with their authors. [9]

Guides and formats for the exchange of health information for a health ISMS: In this document, the DGIS refers to a reference framework for the implementation of an information security management system based on ISO 27799, which takes the ISO/IEC 27002. [10]

As we can see, the first steps have been taken to regulate and organize the use of the ECE at the national level, however the policies do not have an appropriate level of specificity to guide an adequate development of processes for interoperability, they have simply been identified and named. the most widely used international standards for the definition of processes and exchange of information in health matters.

Unfortunately, a setback is identified, in the 2010 publication there was an identification of the minimum modules required for an ECE while in the update to 2012 this task was delegated to the guides and formats that would be developed later, even though they do not exist and only appear from a list of various international reference frameworks that can lead to different implementations, not necessarily interoperable. In the 2010 standard, despite the categorization of the standard functionality, the characteristics that this functionality represents were not detailed enough, for example in the medical care section, order management chapter and index results.

Management functionality of orders and medications established the following:

- a) It must allow the selection of medicines from a catalog.
 - b) Must show the list of medications prescribed to the patient.
 - c) It must allow the capture of medications reported in any other prescription on the existing list.
 - d) You must ensure the complete completion of the fields referring to the general instructions, name of the medication to be prescribed, dose, route of administration and duration of treatment.
 - e) It must show inactive and/or solved problems.
 - f) It must allow the linking of drug orders, with the drug inventory of the pharmacy for its supply.
 - g) It is recommended to alert the doctor when filling out the medication request if the medical insurance does not cover or partially covers the indicated medical treatment.
- There is no definition of alerts for intake, identification of conflicts or interactions with previously ordered medications, or inclusion of special instructions for intake.
 - In the next section I will name some examples of efforts in the use of ECE that have been carried out in different institutions, where we can clearly see how coordination work is needed at the federal level, understanding by this a national digital strategy that defines the direction for that all dependencies work towards the same goal.

Current Implementations

Efforts in the field of ICTs referring to the use of ECE in different dependencies have already come a long way, however previous efforts are perceived as isolated depending on each institution and it is until the past six-year term and the current one that a second wind of momentum begins. to the implementation of ECE in the main institutions of the country.

For analysis purposes we will consider the following public institutions:

IMSS: Mexican Social Security Institute

ISSSTE: Institute of Security and Social Services for State Workers

PEMEX: Petróleos Mexicanos

SSA: Ministry of Health

For each one we will break down the efforts that have been carried out for the implementation or at least the structuring to implement an ECE.

Health Secretary

He takes the first steps in creating national systems for epidemiological surveillance records in 1995 and subsequent evolutions [11]:

National Epidemiological Surveillance System (SINAVE)

Single Information System for Epidemiological Surveillance (SUIVE)

Unique Automated Epidemiological Surveillance System (SUAVE)

Later, in the creation of Seguro Popular, it sought to include the use of technology through different efforts [11]:

2001 – 2005 TUSALUD Card: Card used to register personnel enrolled in popular insurance through a single method. Both beneficiaries and affiliated pharmacies were registered for the sale of medicines.

2000 – 2006 Hospital Administration System (SAHO): Focused on the use of free software and the development of SAHO began, four main modules were defined: medical services, administrative services, catalog management, and medical agenda management. About 20 Hospitals used the first version of this system.

2007 Official Mexican Standard: The Ministry of Health begins the development of the standard to control the ECE considering aspects of interoperability, processing, interpretation and information security. It was planned to generate an interoperability model between 2007 and 2012.

ISSSTE

Being part of the main health institutions in Mexico, it was also one of the pioneers in the development of ECE through the following efforts:

1991 Integral Medical Information System: Concentrates statistical information on hospital care.

1975 Automated Detection and Diagnosis Clinic: Registration of clinical history in the system.

1995 Hospital 20 de Noviembre: Adopted the Hospital Information System (SIAH) text-based interface, with different modules for clinical history, medication management, pharmacy, laboratory, social work, statistics and continuous admission and outpatient flows.

IMSS

It is the main health institution in Mexico with more than 16 million affiliates.

Efforts in the use of ECE are as follows [12]:

2002 Sistema de Medicina Familiar (SIMF): specialised in first level medical care, including laboratory, imaging and administrative staff. [11]

2004 The outpatient module was integrated into the SIMF, as well as statistical reports for the Integrated Health Care Information System (SIAIS).

2004 Implementation of the Hospital Outpatient Information System (SICEH) began for second and third level units as well as IMSS Vista for hospital control.

2006 SIMF covers over 90% of first level units with sustained use from 2007 onwards.

Modules developed:

- Diary management.
- Clinical history.
- Diagnosis and treatment aids.
- Electronic prescription.
- Referral and counter-referral.
- PrevenIMSS.
- Social work.
- Hospitalisation.
- Emergency room.
- Operating theatre.
- Nursing.
- Pathological Anatomy.

International integration standards such as HL7 and DICOM are used.

- 2006 Creation of a Digital Hospital with the best technology available at the time through partnerships with different technology institutions (Intel, Awarix, Deloitte, Cisco, HP, Microsoft and Phillips) integrating 17 additional systems to SICEH, SIMF and IMSS Vista to include pharmacy, nutrition, collaboration, real-time location, drug monitoring and telemedicine modules.

PEMEX

It is the third largest health institution in the country, and is responsible only for covering services for its own employees and their families. It has the following systems:

Institutional Pharmacy Administration System (SIAF): Started in 2003.

Institutional System of Hospital Administration (SIAH): Manages the administrative control in the integration of the patient's account as well as the integration of Diagnostic and Therapeutic Guides.

Progression of improvements:

- 1997 Appointment control
- 2001 Clinical Note
- 2003 Electronic Prescription
- 2004 Laboratory, Hospitalisation and Information Kiosks
- 2005 Operating theatres
- 2006 Imaging and clinical practice guidelines
- 2007 Universal Record
- 2010 Personal card via the internet and epidemiological surveillance module
- 2011 Digital and web-based imaging

Public-Private Partnership Model

Since the last six years, PPP schemes have gained momentum for initiatives in the construction and replacement of hospitals. Under this scheme, attempts have been made to replicate the example of the "Digital Hospital" developed by the IMSS with different results, although as previously reviewed, between 5 and 7 years must pass to observe the most consistent and mature results in the implementation of a PPP, in the case of a public-private partnership model it is likely to be at least 7 years since under this scheme the following characteristics are present:

- The institution applying for a Hospital in PPP model requests services, equipment, systems and construction or demolition.
- Concessions are for 20 to 25 years.

The investor, provider or developer creates a specific purpose partnership to:

- Design and build the new hospital based on the requirements of the institution, in some cases the design is already
- Design and build the new hospital based on the institution's requirements, in some cases the design already exists.

- Operate the requested services in the hospital. They usually request between 18 and 25.
- Equip the hospital based on the institution's requirements.
- Provide and integrate the systems that cover the needs:
- ECE
- Laboratory Systems (LIS)
- Imaging Systems (RISPACS)
- Diagnostic and Treatment Assistants
- Administrative (ERP)

As IMSS did with the -Digital Hospital model, the idea of PPPs is to integrate state-of-the-art systems and equipment in a Hospital that works in an integrated manner to provide the best possible services, however, it is precisely in these schemes where the lack of guidance from the authorities for interoperability is evident.

Hospitals built and operated under the PPP scheme include the following [13].

Conclusion

The adoption of ECE in Mexico is still at an early stage, although there are different initiatives in the main health institutions in the country, the efforts are not coordinated by a federal level agency, and at the same time no standard operating model and generally applicable business rules have been created that would be applicable to all hospitals in the country.

Interoperability of the various ECEs under development. In the absence of a federal strategy, Mexico still lacks a direction to unite the incipient systems towards a consolidation of a universal dossier.

On the other hand, the various efforts have concentrated on free software and internal developments that have been in charge of solving operational problems without seeking the creation of intelligent systems capable of supporting medical decisions as well as the creation of integrated systems that involve extensive connections to the different specific information systems commonly present in a hospital (imaging, laboratory, nutrition, vital signs, etc.).

In the same way, the public-private partnership scheme for the creation of digital hospitals with high technological integration represents the closest effort to the definition of integral operation models that allow the use and development of ECE with high interoperability, however, so far there are no examples of information exchange between different PPP hospitals.

References

1. J. M. M. Hector Robledo Galvan, "De la idea al concepto en la calidad en los servicios de salud," *Revista CONAMED*, vol. 17, no. 4, pp. 172-175, 2012.
2. e. a. Ricardo Pérez Cuevas, "Evaluating quality of care for patients with type 2 diabetes using electronic health record information in Mexico," *BMC. Medical Informatics and Decision Making*, 2012.
3. T. Francis, "Electronic Health Records: Where we are and where we are going," *Physician Executive*, pp. 82-84, August 2013.
4. R. Rozemblum and Y. Jang, "A qualitative study of Canada's experience with the implementation of electronic health information technology," *Canadian Medical Association Journal*, pp. E281-E288, 22. March 2011.
5. S. R. Eastaugh, "Electronic Health Records Lifecycle Cost," *Journal of Healthcare Finance*, pp. 36-43, 2013.
6. A. M. Ramirez, "Factores Inhibidores de la Calidad en los Servicios de Salud. Análisis desde la perspectiva de los Hospitales privados y públicos.," *Revista CONAMED*, vol. 14, no. 4, pp. 5-14, Octubre 2009.

7. SSA, "NOM-024-SSA3-2012 Sistemas de Información de registro electrónico para la salud. Intercambio de información en salud," Diario Oficial de la Federación, pp. 79-96, 2012. LOS TIEMPOS (9 de abril del 2000). pp.C1.

The proposed curriculum and timetable as part of the implementation of Law 070 on productive socio-community education and its impact on Bolivian education

La propuesta de la malla curricular y la carga horaria como parte de la implementación de la Ley 070 de educación socio-comunitaria productiva y su repercusión en la educación boliviana

BAILEY, Carla†*, RENDON, Alex and LEAÑO, Karla

Universidad Mayor Real y Pontificia de San Francisco Xavier de Chuquisaca – Asociación de Sociedades Científicas. Calle N° 652, Bolivia.

ID 1st Author: *Carla, Bailey*

ID 1st Co-author: *Alex, Rendon*

ID 2nd Co-author: *Karla, Leño*

DOI: 10.35429/JEH.2022.10.6.38.41

Received January 10, 2022; Accepted June 30, 2022

Abstract

The proposal that initially looks innovative lost quickly its charm when started to implement the regulations, dispositions, and upper circulars to apply a new educative model called productive socio-community, which have the name of Avelino Siñani and Elizardo Perez Law; at the beginning many that came with hopes for a law that favor the education of children, teenagers and adults ended for woke to see the uncertainty, the confusion, in which the Bolivian education is in the middle of the present year. Without doubt there are who still believe in that will be something that could be beneficial, in the other hand are the followers of the government which strive to go ahead to any cost with the application of all that is dictated with any kind of analysis or considerations; and finally are those who are convinced that the application of the law 070 will only carry more damages to the education and the society itself than benefits.

Education, Benefits, Damages, Law, Students, Teachers

Resumen

La propuesta que inicialmente parece innovadora perdió rápidamente su encanto cuando se empezaron a implementar los reglamentos, disposiciones, y circulares superiores para aplicar un nuevo modelo educativo llamado socio comunitario productivo, que llevan el nombre de Ley Avelino Siñani y Elizardo Pérez; al principio muchos que venían con esperanzas de una ley que favorezca la educación de niños, adolescentes y adultos terminaron por ver la incertidumbre, la confusión, en la que se encuentra la educación boliviana a mediados del presente año. Sin duda hay quienes aún creen en que será algo que podría ser beneficioso, por otro lado están los seguidores del gobierno que se empeñan en seguir adelante a cualquier costo con la aplicación de todo lo que se dicte sin ningún tipo de análisis o consideraciones; y finalmente están los que están convencidos de que la aplicación de la ley 070 sólo acarreará más perjuicios a la educación y a la sociedad misma que beneficios.

Educación, Beneficios, Daños, Ley, Estudiantes, Profesores

Citation: BAILEY, Carla, RENDON, Alex and LEAÑO, Karla. The proposed curriculum and timetable as part of the implementation of Law 070 on productive socio-community education and its impact on Bolivian education. Journal-Economic History. 2022. 6-10:38-41.

*Correspondence to the author (E-mail: baileycarla681@gmail.com)

† Researcher contributing as first author

Introduction

The consequences of inadequate training in the education system are diverse, ranging from the low numbers of students entering university at the beginning of each year, which leads to dissatisfaction among parents and criticism of higher education institutions such as the San Francisco University and the Pedagogical University, to the failure of the students as people with a moral, economic, professional, psychological crisis, etc. For we know that a society is the result of its education.

Undoubtedly, the problem of education in Bolivia is a concern of parents, students and teachers, which is why the repercussions are so angry on both sides in contradiction, i.e. those who defend the Ministry's proposal on the one hand and those who defend the interests of teachers and students on the other.

The development of a curriculum should be in accordance with the needs of students, higher education institutions and society itself, and should respond to these needs. Furthermore, this curriculum will be closely related to the time load for each subject, and for each level. The productive socio-community paradigm is an interesting proposal but very limiting, and although revaluing the conquests of the Andean ancestors is good, it is not the only thing to revalue, nor is it the only thing that can solve and replace the world crisis that exists at all levels, in fact it would not even solve the problems of the country, or at least of a region.

I will now present the pros and cons of Law 070, starting by giving general information on what has been happening in education in Bolivia since the creation of the Mariscal Sucre National School of Teachers up to the present day, and then going on to analyse the intentions of the Avelino Siñani Elizardo Pérez education law, in order to reach conclusions.

Theoretical framework

The Political Constitution of the State recognises the importance of education, establishing that the first and most important function of the State is education, which is why it is logical to think that the country should have a state policy and a serious government policy that allows for the development of education for the progress of society.

After the creation of the Escuela Nacional de Maestros Mariscal Sucre in 1909, teachers were trained according to the behaviourist paradigm that was used at the time, and later regulations were drawn up to regulate the teaching profession, one of the regulations was the Education Code, as well as the Regulations of the Scale and the Regulations on Misdemeanours and Penalties, so that teachers were not governed by the general labour law.

In the 1990s, the paradigm was changed from behaviourist to constructivist, new work texts, called modules, were implemented; In addition, new hierarchical positions with high salaries were created, the names of the positions of authorities were changed, for example from supervisors to district directorates, and it was proposed to assign technical subjects to course teachers, thus affecting the relevance and sources of work of teachers, as well as seriously affecting the quality of education by introducing and demanding the application of some distracting techniques and methods that do not focus on the learning itself and delay the time and space for learning.

With the consequences of the application of Law 15659, of the constructivist paradigm, although not in its entirety or at all levels of education, which were negative for students who left school with more marked deficiencies than with the previous method, despite the fact that they did not work entirely with the material and the form proposed by the law, this continued until the promulgation of Law 070 Avelino Siñani and Elizardo Pérez in 2010.

With the slogan "made in Bolivia", Law 070, supposedly with the support and consensus of the entire Bolivian teaching profession in general, began to plan the regulations that are causing serious problems within the teaching profession, with a reduction in hours, the merging of subjects¹⁰ and a reduced timetable for several of them, The direct detriment to students is clearly shown by the untimely preparation of timetables due to the issuing of extemporaneous instructions that indicate and counter-indicate, producing confusion and misinformation among teachers, students and parents, which was clearly seen in the current administration of the Bolivian education system¹¹.

The 1994 education reform law, together with a package of laws that were called the "damned laws" by the working population because of their devastating effect on society at that moment in history, even more so after what happened with the laws of the previous decade, which resulted in the relocation of mining workers in the area of state mining production, as well as in the State Railway Company, leaving the rest of the workers very vulnerable.

As established in the new evaluation regulation that was socialised through digital media, which contains modifications to the printed regulation in which only some subjects of the new reordering of what is called the fields of knowledge that groups the subjects with a strange and capricious association are salified.

A clear example of this is a publication published by the Ministry of Education in the local newspaper of the capital of the country Sucre, in which it states that the teachers' timetable will not be affected, so that the curriculum will not go forward if it does and that the directors who contradict the provision will be sanctioned, all this in clear contradiction with the form of qualification that foresees the complete application of the curriculum at all levels of regular education.

All this is developed according to the socio-community productive model and this means that the students can produce something in the school, school, educational unit or, as it is now called, communities of production and educational transformation CP-TE12, in favour of the community surrounding the educational establishment, the initial idea says that the production should favour the components of the educational unit, that is, the students, teachers, parents who live nearby, as all of them would be part of the educational community and the community that is part of the establishment; This worked very well in Warisata¹³ and nowadays in some rural sectors far away from populated centres. In the more or less populated cities or provinces, students travel considerable distances to reach their educational centre, that is, not all students have their home and family nearby, the community around them is part of other educational centres with other characteristics, customs or needs, which makes it impossible to produce things for the educational community or for the community.

But not only is this inconvenient, but the production of an educational unit is reduced to something like bread, or soft drinks, or vegetables, due to the limitations of space, time mainly, and there is also the fact that it disconnects the main function of the establishment with the activity that is intended to be incorporated, without equipment, neither physical, nor technological, nor economic, like an experiment that wastes the time of both teachers and students in their objective of professionalisation and specialisation.

These are some of the many drawbacks that should be overcome, another and more serious one would be the organisation and distribution of the cities that would have to be changed so that entrepreneurship is minimally possible, because trying to reduce hours of scientific subjects to reduce the economic burden of the state with the salaries of teachers is not on the way to strengthen education or implement the productivity of schools, colleges or any educational centre, as we can see it does not in any way make education productive, better or more advantageous for students, parents, teachers or society; While the world is working to improve practices that slow us down or harm us, we are trying to go back in time to transpose a model that does not fit into the current social, economic, technological and educational organisation.

From the collection "Cuadernos de Formación Complementaria Unidad de formación No. 1".

The 1930s in Bolivia in the rural area of the department of La Paz. First attempt at education in the countryside, since at that time education was elitist and excluded people who did not live in the cities or were not part of a certain social circle. In which it was shown that villagers from infants to adults could learn to read, write, do mathematics and more in parallel to the production of food, clothing, and other things the community needed.

This does not in any way mean that the values and teachings of the past are not good or useless, on the contrary, it is necessary to rescue many positive things, not only from the pre-Columbian past but also from the present of the native peoples of Bolivia and the whole world, but we should not underestimate what humanity has achieved throughout all this time, because just as there are negative things, there are also positive aspects in the development of science, technology, thought, life and philosophy of our times.

Conclusions

What is more possible, more reasonable and worthwhile is the revalorisation and adaptation of much knowledge that was practised in the Andean past, the present of other Bolivian nations, to carry it out as far as possible in our current societies and education, without this meaning to diminish, remove or negatively affect the present or future of Bolivians, be they students, teachers or parents.

Everything that means diminishing the ills of our current societies, through education or any other means, is worthy of consideration, and should be put into practice, even better if its social cost is lower.

References

Constitución Política del Estado; La Paz 2009

Legislación Escolar boliviana; edición autorizada Resolución Ministerial No. 011/90 Código de la Educación Boliviana, Reglamento del Escalafon Nacional, Reglamento de Faltas y Sanciones del Magisterio y Personal Administrativo, La Paz

Ley Avelino Siñani Elizarso Perés 070; La Paz 20 de diciembre de 2010

Ley de Reforma Educativa 1565; La Paz 1994

Ministerio de Educación (2013) Unidades de formación No.1-12. Cuadernos de Formación Continua. Equipo Profocom. La Paz Bolivia.

Programas de estudio del Ministerio de Educación; La Paz 2011-2013.

Instructions for Scientific, Technological and Innovation Publication

[Title in Times New Roman and Bold No. 14 in English and Spanish]

Surname (IN UPPERCASE), Name 1st Author†*, Surname (IN UPPERCASE), Name 1st Coauthor, Surname (IN UPPERCASE), Name 2nd Coauthor and Surname (IN UPPERCASE), Name 3rd Coauthor

Institutional Affiliation of Author including Dependency (No.10 Times New Roman and Italic)

International Identification of Science - Technology and Innovation

ID 1st Author: (ORC ID - Researcher ID Thomson, arXiv Author ID - PubMed Author ID - Open ID) and CVU 1st author: (Scholar-PNPC or SNI-CONACYT) (No.10 Times New Roman)

ID 1st Co-author: (ORC ID - Researcher ID Thomson, arXiv Author ID - PubMed Author ID - Open ID) and CVU 1st co-author: (Scholar or SNI) (No.10 Times New Roman)

ID 2nd Co-author: (ORC ID - Researcher ID Thomson, arXiv Author ID - PubMed Author ID - Open ID) and CVU 2nd co-author: (Scholar or SNI) (No.10 Times New Roman)

ID 3rd Co-author: (ORC ID - Researcher ID Thomson, arXiv Author ID - PubMed Author ID - Open ID) and CVU 3rd co-author: (Scholar or SNI) (No.10 Times New Roman)

(Report Submission Date: Month, Day, and Year); Accepted (Insert date of Acceptance: Use Only RINOE)

Abstract (In English, 150-200 words)

Objectives
Methodology
Contribution

Keywords (In English)

Indicate 3 keywords in Times New Roman and Bold No. 10

Abstract (In Spanish, 150-200 words)

Objectives
Methodology
Contribution

Keywords (In Spanish)

Indicate 3 keywords in Times New Roman and Bold No. 10

Citation: Surname (IN UPPERCASE), Name 1st Author, Surname (IN UPPERCASE), Name 1st Co-author, Surname (IN UPPERCASE), Name 2nd Co-author and Surname (IN UPPERCASE), Name 3rd Co-author. Paper Title. Journal-Economic History. Year 1-1: 1-11 [Times New Roman No.10]

* Correspondence to Author (example@example.org)

† Researcher contributing as first author.

Introduction

Text in Times New Roman No.12, single space.

General explanation of the subject and explain why it is important.

What is your added value with respect to other techniques?

Clearly focus each of its features

Clearly explain the problem to be solved and the central hypothesis.

Explanation of sections Article.

Development of headings and subheadings of the article with subsequent numbers

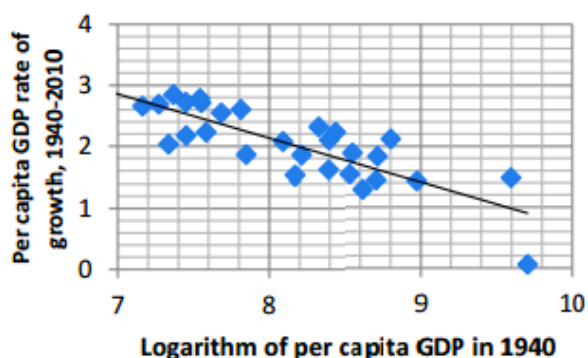
[Title No.12 in Times New Roman, single spaced and Bold]

Products in development No.12 Times New Roman, single spaced.

Including graphs, figures and tables-Editable

In the article content any graphic, table and figure should be editable formats that can change size, type and number of letter, for the purposes of edition, these must be high quality, not pixelated and should be noticeable even reducing image scale.

[Indicating the title at the bottom with No.10 and Times New Roman Bold]



Graphic 1 Title and Source (in italics).

Should not be images-everything must be editable.

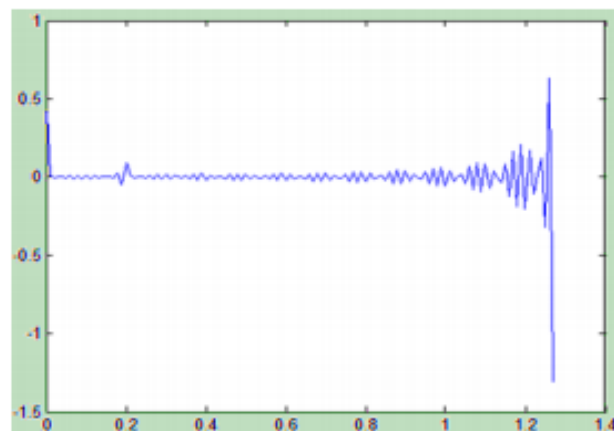


Figure 1 Title and Source (in italics).

Should not be images-everything must be editable.

	Cluster		Error		F	Sig.
	Mean square	df	Mean square	df		
SOLVENCY	77.287	4	.426	532	181.247	.000
LIQUIDITY	77.182	4	.427	532	180.669	.000
SIZE	62.602	4	.537	532	116.616	.000
PROFITABILITY	68.655	4	.491	532	139.738	.000

Table 1 Title and Source (in italics).

Should not be images-everything must be editable.

Each Article shall present separately in **3 folders**: a) Figures, b) Charts and c) Tables in .JPG format, indicating the number and sequential Bold Title.

For the use of equations, noted as follows:

$$Y_{ij} = \alpha + \sum_{h=1}^r \beta_h X_{hij} + u_j + e_{ij} \quad (1)$$

They must be editable and number aligned on the right side.

Methodology

Develop give the meaning of the variables in linear writing and important is the comparison of the used criteria.

Results

The results shall be by section of the Article.

Annexes

Tables and adequate sources

Thanks

Indicate if they were financed by any institution, University or company.

Instructions for Scientific, Technological and Innovation Publication

Conclusions

Explain clearly the results and possibilities of improvement.

References

Use APA system. Should not be numbered, nor with bullets, however if necessary numbering will be because reference or mention is made somewhere in the Article.

Use Roman Alphabet, all references you have used must be in the Roman Alphabet, even if you have quoted an Article, book in any of the official languages of the United Nations (English, French, German, Chinese, Russian, Portuguese, Italian, Spanish, Arabic), you must write the reference in Roman script and not in any of the official languages.

Technical Specifications

Each Article must submit your dates into a Word document (.docx):

Journal Name
Article title
Abstract
Keywords

Article sections, for example:

1. *Introduction*
2. *Description of the method*
3. *Analysis from the regression demand curve*
4. *Results*
5. *Thanks*
6. *Conclusions*
7. *References*

Author Name (s)
Email Correspondence to Author
References

Intellectual Property Requirements for editing:

-Authentic Signature in Color of Originality
Format Author and Coauthors

-Authentic Signature in Color of the Acceptance
Format of Author and Coauthors

Reservation to Editorial Policy

RINOE Journal-Economic History reserves the right to make editorial changes required to adapt the Articles to the Editorial Policy of the Journal. Once the Article is accepted in its final version, the Journal will send the author the proofs for review. RINOE® will only accept the correction of errata and errors or omissions arising from the editing process of the Journal, reserving in full the copyrights and content dissemination. No deletions, substitutions or additions that alter the formation of the Article will be accepted.

Code of Ethics - Good Practices and Declaration of Solution to Editorial Conflicts

Declaration of Originality and unpublished character of the Article, of Authors, on the obtaining of data and interpretation of results, Acknowledgments, Conflict of interests, Assignment of rights and Distribution.

The RINOE® Management claims to Authors of Articles that its content must be original, unpublished and of Scientific, Technological and Innovation content to be submitted for evaluation.

The Authors signing the Article must be the same that have contributed to its conception, realization and development, as well as obtaining the data, interpreting the results, drafting and reviewing it. The Corresponding Author of the proposed Article will request the form that follows.

Article title:

- The sending of an Article to RINOE Journal-Economic History emanates the commitment of the author not to submit it simultaneously to the consideration of other series publications for it must complement the Format of Originality for its Article, unless it is rejected by the Arbitration Committee, it may be withdrawn.
- None of the data presented in this article has been plagiarized or invented. The original data are clearly distinguished from those already published. And it is known of the test in PLAGSCAN if a level of plagiarism is detected Positive will not proceed to arbitrate.
- References are cited on which the information contained in the Article is based, as well as theories and data from other previously published Articles.
- The authors sign the Format of Authorization for their Article to be disseminated by means that RINOE® in its Holding Bolivia considers pertinent for disclosure and diffusion of its Article its Rights of Work.
- Consent has been obtained from those who have contributed unpublished data obtained through verbal or written communication, and such communication and Authorship are adequately identified.
- The Author and Co-Authors who sign this work have participated in its planning, design and execution, as well as in the interpretation of the results. They also critically reviewed the paper, approved its final version and agreed with its publication.
- No signature responsible for the work has been omitted and the criteria of Scientific Authorization are satisfied.
- The results of this Article have been interpreted objectively. Any results contrary to the point of view of those who sign are exposed and discussed in the Article.

Copyright and Access

The publication of this Article supposes the transfer of the copyright to RINOE® in its Holding Bolivia for its RINOE Journal-Economic History, which reserves the right to distribute on the Web the published version of the Article and the making available of the Article in This format supposes for its Authors the fulfilment of what is established in the Law of Science and Technology of the United Mexican States, regarding the obligation to allow access to the results of Scientific Research.

Article Title:

Name and Surnames of the Contact Author and the Co-authors	Signature
1.	
2.	
3.	
4.	

Principles of Ethics and Declaration of Solution to Editorial Conflicts

Editor Responsibilities

The Publisher undertakes to guarantee the confidentiality of the evaluation process, it may not disclose to the Arbitrators the identity of the Authors, nor may it reveal the identity of the Arbitrators at any time.

The Editor assumes the responsibility to properly inform the Author of the stage of the editorial process in which the text is sent, as well as the resolutions of Double-Blind Review.

The Editor should evaluate manuscripts and their intellectual content without distinction of race, gender, sexual orientation, religious beliefs, ethnicity, nationality, or the political philosophy of the Authors.

The Editor and his editing team of RINOE® Holdings will not disclose any information about Articles submitted to anyone other than the corresponding Author.

The Editor should make fair and impartial decisions and ensure a fair Double-Blind Review.

Responsibilities of the Editorial Board

The description of the peer review processes is made known by the Editorial Board in order that the Authors know what the evaluation criteria are and will always be willing to justify any controversy in the evaluation process. In case of Plagiarism Detection to the Article the Committee notifies the Authors for Violation to the Right of Scientific, Technological and Innovation Authorization.

Responsibilities of the Arbitration Committee

The Arbitrators undertake to notify about any unethical conduct by the Authors and to indicate all the information that may be reason to reject the publication of the Articles. In addition, they must undertake to keep confidential information related to the Articles they evaluate.

Any manuscript received for your arbitration must be treated as confidential, should not be displayed or discussed with other experts, except with the permission of the Editor.

The Arbitrators must be conducted objectively, any personal criticism of the Author is inappropriate.

The Arbitrators must express their points of view with clarity and with valid arguments that contribute to the Scientific, Technological and Innovation of the Author.

The Arbitrators should not evaluate manuscripts in which they have conflicts of interest and have been notified to the Editor before submitting the Article for Double-Blind Review.

Responsibilities of the Authors

Authors must guarantee that their articles are the product of their original work and that the data has been obtained ethically.

Authors must ensure that they have not been previously published or that they are not considered in another serial publication.

Authors must strictly follow the rules for the publication of Defined Articles by the Editorial Board.

The authors have requested that the text in all its forms be an unethical editorial behavior and is unacceptable, consequently, any manuscript that incurs in plagiarism is eliminated and not considered for publication.

Authors should cite publications that have been influential in the nature of the Article submitted to arbitration.

Information services

Indexation - Bases and Repositories

RESEARCH GATE (Germany)

GOOGLE SCHOLAR (Citation indices-Google)

MENDELEY (Bibliographic References Manager)

Publishing Services

Citation and Index Identification H.

Management of Originality Format and Authorization.

Testing Article with PLAGSCAN.

Article Evaluation.

Certificate of Double-Blind Review.

Article Edition.

Web layout.

Indexing and Repository

Article Translation.

Article Publication.

Certificate of Article.

Service Billing.

Advertising & Sponsorship

21 Santa Lucía, CP-5220. Libertadores - Sucre – Bolivia. Phones: +52 1 55 1260 0355, +52 1 55 6159 2296, +52 1 55 6034 9181; E-mail: contact@rinoe.org www.rinoe.org

Journal-Labor and Demographic economics

Editor in chief

SUYO-CRUZ, Gabriel. PhD

Executive director

RAMOS-ESCAMILLA, María. PhD

Editorial Director

PERALTA-CASTRO, Enrique. MsC

Web designer

ESCAMILLA-BOUCHAN, Imelda. PhD

Web Diagrammer

LUNA-SOTO, Vladimir. PhD

Editorial Assistants

TREJO-RAMOS, Iván. BsC

Philologist

RAMOS-ARANCIBIA, Alejandra. BsC

Advertising & Sponsorship

(RINOE® - Bolivia), sponsorships@rinoe.org

Site Licences

03-2010-032610094200-01-For printed material, 03-2010-031613323600-01-For Electronic material,03-2010-032610105200-01-For Photographic material,03-2010-032610115700-14-For the facts Compilation,04-2010-031613323600-01-For its Web page,19502-For the Iberoamerican and Caribbean Indexation,20-281 HB9-For its indexation in Latin-American in Social Sciences and Humanities,671-For its indexing in Electronic Scientific Journals Spanish and Latin-America,7045008-For its divulgation and edition in the Ministry of Education and Culture-Spain,25409-For its repository in the Biblioteca Universitaria-Madrid,16258-For its indexing in the Dialnet,20589-For its indexing in the edited Journals in the countries of Iberian-America and the Caribbean, 15048-For the international registration of Congress and Colloquiums. financingprograms@rinoe.org

Management Offices

21 Santa Lucía, CP-5220. Libertadores - Sucre – Bolivia.

Journal-Economic History

“Gender historiography in Bolivia”

ARANCIBIA, Maribel & CLAVIJO, Cadiz

Universidad Mayor, Real y Pontificia de San Francisco Xavier de Chuquisaca

“Contributions to economic theory and the relevance of Mrs. Joan Robinson”

PÁEZ, Jaime

Universidad Central

“Adoption of the electronic medical record in Mexico: a review of the status”

RAMOS-GONZÁLEZ, Javier

Universidad Iberoamericana

“The proposed curriculum and timetable as part of the implementation of Law 070 on productive socio-community education and its impact on Bolivian education”

BAILEY, Carla, RENDON, Alex and LEAÑO, Karla

Universidad Mayor Real y Pontificia de San Francisco Xavier de Chuquisaca



2 5 2 4 | 2 0 5 9

ISSN 2524 - 2059



www.rinoe.org