

International Perspectives on the Youth Labor Market: Emerging Research and Opportunities

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Persistent unemployment and rising wage differences at the expense of low-skilled workers has characterized the labor market in most developed countries. Since the last economic crisis, unemployment rates and pay inequalities have increased among workers under 25 years of age, thus creating an ever-widening financial gap for an entire generation. Those who do not have a qualification or post-secondary diploma often find themselves in precarious jobs at minimum wage. Countries are now working to adopt reforms to improve the situation of young people in the labor market.

International Perspectives on the Youth Labor Market: Emerging Research and Opportunities provides emerging research exploring the theoretical and practical aspects of financial inequality and applications within global economics. Unlike literature that focuses only on developed countries, this book also addresses emerging economies whose labor market is often characterized by a dualism that makes the situation of young workers worse. Featuring coverage on a broad range of topics such as unemployment rate, labor reform, and job insecurity, this book is ideally designed for economists, government officials, policymakers, executives, managers, business professionals, researchers, academicians, and students.

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Higher Education and Employment: Highlights From the Economic History of Mexico

Jose Ernesto Rangel Delgado
University of Colima, Mexico

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ABSTRACT

The articulation of higher education and employment acquires special relevance due to its impact to the youth labor market. Some of the tendencies in the Mexican economy during the sixties and seventies and the beginning of the eighties until the 21st century are the following: the expansion of educational coverage, the urbanization of development and labor market, as well as the middle-class consolidation and graduate exclusion of the labor market. These factors oriented the higher education predominantly to human resources generation, firstly, for the industrial sector and, secondly, for the tertiary sector of the knowledge society with a large unemployment and underemployment of graduates.

INTRODUCTION

At present, knowledge is the central element of the new productive paradigm. Unlike other times, competitive advantages are not only based on natural factors, but on aspects related to the generalization and application of knowledge.

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Thus, any development strategy depends, to a large extent, on the existence of a solid science and technology system, of trained managerial and administrative cadres and of educated manpower. And the former is based on an appropriate articulation between education and the productive sector. The education can't be restricted to a purely utilitarian dimension, being indisputable that education and capacity building are decisive factors for the development process responding with relevance and flexibility to changing conditions. Further, the graduates need a labor structure that takes advantage of their abilities, which implies a coherent and solid industrial and economic policy that channels with adequately the available human resources.

In the current environment of economic globalization and even global fragmentation of markets, it is important to understand from a historical perspective the main economic growth models that have characterized Mexico, and their relationship with higher education and employment in order to identify some factors that arise from the linking of public policies that support new strategies aimed at the youth labor market.

From 1930 to 1958, Mexico carried out industrialization process based on the imports' substitution with the active participation of national capital that was formed after 1930 and with a strong state that allowed the consolidation of the existing national businesses.

In economic terms, during this period the use of national resources by incipient national companies was fomented for the generation of productive chains. The economic policy of the period was based on the stimulus of public spending and investment and, to a lesser extent, on private investment. The government was interested in promoting full employment in the face of a protectionist policy.

The expropriation of oil in 1938 meant for Mexico a rupture with the technological source provided by the United States. This led to an economic disorder whose correction was subsequently reflected in the consolidation of Mexico's oil system. Likewise, the Keynesian policy of full employment allowed the continuity of the protectionist policy along with the contemporary nationalist discourse.

From 1946 to 1958 the process of industrialization was reorganized; this is the period when the oil, chemical, pharmaceutical, cosmetics, automotive, household appliances and light electrical machinery industries were established. There was also a more active participation of foreign capital, particularly in the form of direct foreign investment.

However, from 1958 to 1970, the presence of foreign capital began to decrease due to the stricter state control of the basic sectors owned by foreigners (the government acquires the two largest foreign companies generating electric power and new legislation on mining industry was issued). A new moment of industrialization was beginning to take shape in the economic history of Mexico, although doubts arose about the "contribution of foreign capital to the technological progress of

a society whose delay in this aspect is directly due to the inadequate educational system. This interpretation [...] of the problem was and still is defining the policy of industrialization including the education as an important factor “(Fonseca, 1994).

With the development of the capital goods industry, from 1970 to 1980 imports' substitution deepened. The exploitation of new oil fields and the sale of oil, as well as the opening of international credit, attracted a high flow of foreign capital that made viable the development of a national capital goods industry. However, bypassing the industrial discipline that implied imports' substitution and allocating a large amount of foreign currency to the imports of different kinds of products, affected the integration of the Mexican industry.

Indebtedness was the most serious consequence of the decade of the eighties. The orientation of economic policy to the solution of problems of a financial, monetary and commercial nature, turned into a strategy of greater openness to international trade. The application of trade balance and liberalization policies was promoted, inflation was combated, and the exchange policy was addressed. The opening of foreign investment and the reduction of tariffs on the imports of capital goods were also encouraged. In 1980 Mexico's public and private external debt amounted to 50,713 million dollars and in 1984 it reached 95,264 million dollars (Gurría, 1993). Also, the high trade deficits and the increasing technological dependence of the industry prevented the development of original technologies, thus affecting the long-term competitiveness

At the time, some sectors, such as glass, steel, cement, etc., had technological and economic conditions to overcome the crisis, although, until today it is not the case of most of the small and medium-sized companies that have been affected by the application of a neoliberal model that led to the dismantling of the productive structure formed in previous years.

All this marked the beginning of a new period linking the country to the external market, but without the development of industrial policy oriented to promote the international competition of the country. At present, the absence of an industrial policy clearly affects the links with the labor market, and particularly with the youth labor market. In the nineties, the government of the president Salinas de Gortari, was applying the lemma that “the best industrial policy is the one that does not exist”, thus distorting what once implied an effective articulation between the formation of human resources and employment. In this period the need of a State policy for planning of national employment within the international economic environment, becomes more evident.

However, to rescue some components of planning, in May 1996 the Industrial Policy and Foreign Trade Program were announced. The importance of creating and improving the physical infrastructure, the human and institutional base was stated, and was recognized that the competitiveness of the industry does not depend

exclusively on the abundance of cheap primary resources. Thus, it seeks to improve the physical infrastructure (transport and communications, water supply, energy and basic industrial inputs) and above all strengthen the training of human resources.

Therefore, the articulation of higher education-employment in Mexico was characterized by the periods of imports' substitution, the neoliberal model, and more recently with the knowledge society model that highlights the transition from industry to commerce, and further to knowledge as a generator of added value, in approximately half a century.

To interpret this economic policy associated with higher education and employment, and to answer the questions raised in this chapter, we rely on data for the period between 1960 and 2010, associated with the place of young people in the demographic transformation, according to the age pyramid of Mexico. The data used are: the number of graduates of higher education institutions; the number of employees/unemployed by age range (21-29 years), according to the most demanded professions per decade, as well as the number of researchers by age range.

YOUTH IN THE DEMOGRAPHIC TRANSFORMATION

Figure 1 shows that the increase of the Mexican population has been constant between 1960 and 2010 increasing from 34.5 million people in 1960 to 112.3 million in 2010. This increases the difficulties of allocation of young higher education graduates to jobs corresponding to their academic training.

According to the International Labor Organization (ILO), the youth years are from 21 to 29. The pyramids of ages throughout the period show, that the number of young people in Mexican society increased continually during the period, generating the so-called "demographic bonus" in the first decade of the 21st century (Figure 2, Figure 3, Figure 4). This situation requires the design of a specific employment policy, because the existent one doesn't allow the efficient *incorporation* of young graduates into the labor market. That's why it is common to find young graduates in jobs that do not correspond to their university education. This situation has notoriously affected young population whose expectation of finding a job doesn't correspond to the efforts invested into their training.

Highlight 1: Imports' Substitution

A period, which has been considered, is the decade of the 1920s when Mexico began the search for alternatives to articulate the country economically, socially and politically, attributing to education a fundamental role in shaping the new citizens. The post-revolutionary governments gave priority to primary education, especially

Figure 1. Census of the Mexican population by decades 1960-2010 (age pyramid)
 Source: Taken from INEGI. Total Population /Volume and Growth/ Federative Entity 1895-2010 and INEGI. Intercensal survey, 2015

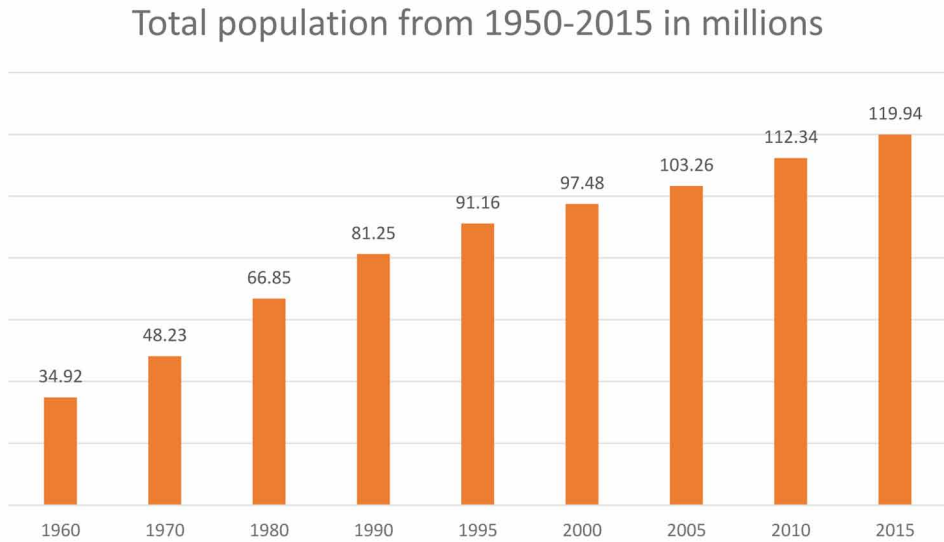
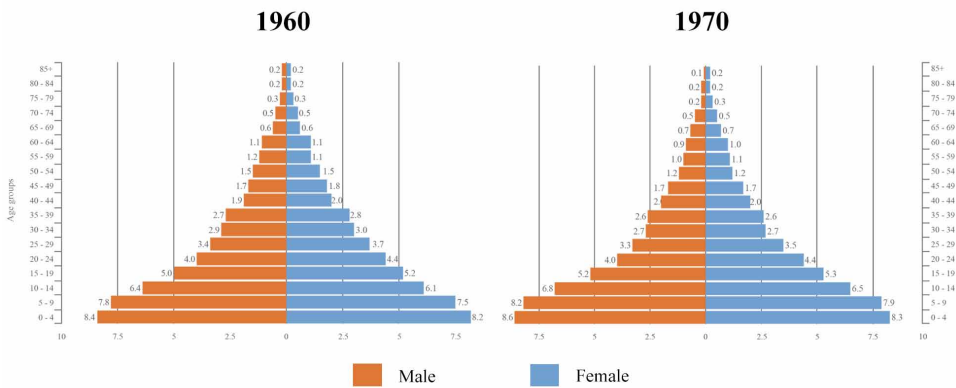


Figure 2. Pyramids of ages and gender corresponding to each population census in the period 1960 – 1970
 Source: Elaborated by the authors in base of the age-gender pyramids from INEGI (1960-1970)



oriented to peasants and workers, considering that there was a close relationship between economic and educational development, although important coverage was not achieved until later stages.

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Figure 3. Pyramids of ages and gender corresponding to each population census in the period 1960 – 1970

Source: Elaborated by the authors in base of the age-gender pyramids from INEGI (1980-1990)

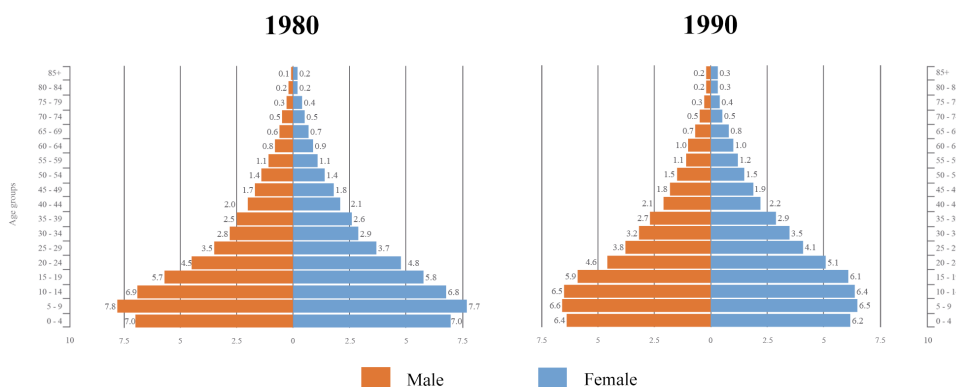
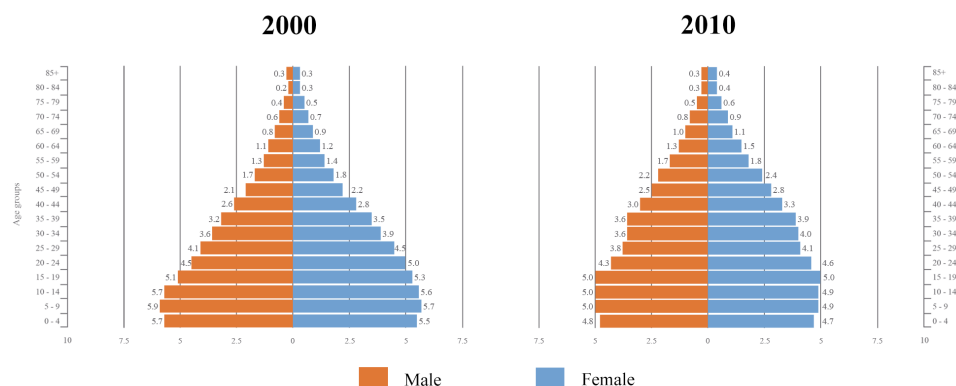


Figure 4. Pyramids of ages and gender corresponding to each population census in the period 1960 – 1970

Source: Elaborated by the authors in base of the age-gender pyramids from INEGI (2000-2010)



Another period is from 1930 to 1940, when the objective was to strengthen the conditions that made industrial development possible, and policies were oriented to the vindication of the interests of the popular sectors through technical and ideological capacity building. This was manifested fostering the technological and higher education, especially by the creation in 1937 of the National Polytechnic Institute (IPN, in Spanish words) in charge of training middle and higher technical cadres to support the industrialization process.

During the 1940s, the educational policy was oriented towards limiting the social character of education to the mere “technical” function, as a result of new political and economic priorities. Muñoz (in Tenti, 1980) points out that: “technical education ceased to be an instrument designed to prepare an intellectual proletariat - as the educational system of the 1930s tried to do - to be considered as an instrument to prepare the personnel that allows to establish bonds of functionality and complementarity between workers and capital owners”. However, the correspondence between education and work could not be established directly, especially because the State maintained the responsibility to define the functionality of the education system, despite pressures from business sectors.

At the end of the 1940s, as a result of the problems of concentration of enrollment in Mexico City, the Regional Technological Institutes (RTIs) were created, arising from the IPN initiative and being integrated into the structure of the Public Education Secretariat (SEP).

Some years later, during the period 1955-1970, training centers for capacity building were established throughout the country and the formation of technical cadres of the highest level was promoted with the creation of the Center for Research and Higher Studies (Cinvestav) of the IPN.

During the decade of the seventies, the technological education system was expanded. At the same time the higher and secondary education institutions were multiplied and diversified.

As the preamble of the labor market for youth in Mexico, and to position it as a substantial part of the higher education-employment relationship, we use data provided by the National Association of Universities and Institutions of Higher Education (ANUIES), throughout the period of particular interest in terms of the number of graduates (Figure 5).

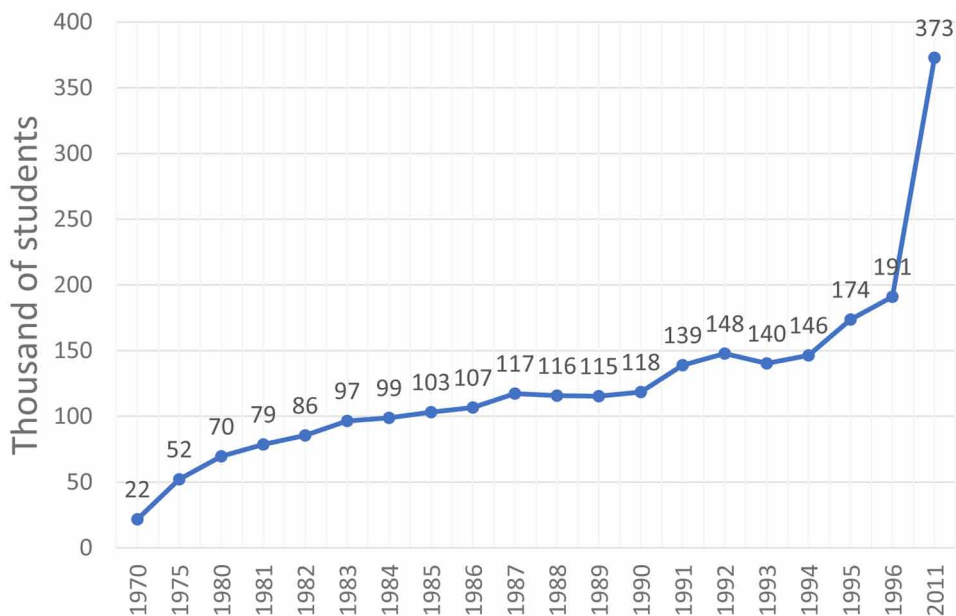
Highlight 2: Neoliberalism

For the eighties and on the eve of 2000, we detected multiple structural transformations in employment, both nationally and internationally. On the one hand, the age and the educational characteristics of the Economically Active Population (EAP) have been substantially modified, and thus the structure of their competences. On the other hand, the circumstances under which employment is exercised have been transformed by globalization, changes in economic development strategies, technological evolution and organizational progress. This coupled with specific, economic and social changes. In particular, the EAP is increasingly schooled and a growing number of students access to higher education, as well as the percentage of the age group between 20 and 29 years in relation to the total population, employed or unemployed, in each decade of the Figure 3 and Table 1 that, being economically

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Figure 5. Number of higher education graduates (universities and technological institutes) in Mexico (1970-2011)

Source: Elaborated by the authors based on the statistic yearbook 1997. School population on undergraduate level in universities and technological institutes. ANUIES



active, found employment or not, or found a job that does not correspond to the efforts invested into their training. Added to this information, we use data of INEGI, related to employment and unemployment, and presented in the following figure:

It can be noted that in the period 1960-2010, the unemployment was proportionally increasing compared to employment (Figure, 4). While in 1960 the proportion of unemployment in relation to the employed population was 1.6%, in 2010 it represented 4.8%, with an important impact on young people due to their increasing proportion in the age pyramid. This is also associated, to the aggressive transition from a closed model to an open one, namely from imports' substitution to exports-based economy. In the later model the export-oriented industries became the engine of growth, propitiating a productive disarticulation that neglects the domestic market and the small enterprises supplying inputs for production. Additionally, the labor market is changing and therefore, the demand for young people modifies according to the new model.

In the period of import substitution, the greater number of graduates of higher education institutions was centered in the social sciences. So, the labor market became saturated with these professions, over time. Mean wise for the neoliberal

Figure 6. Population employed/unemployed by decades 1960-2010 (thousands and millions of persons)

Source: Produced by the authors and based on data on the economic characteristics of each population census of INEGI (1960-2010)

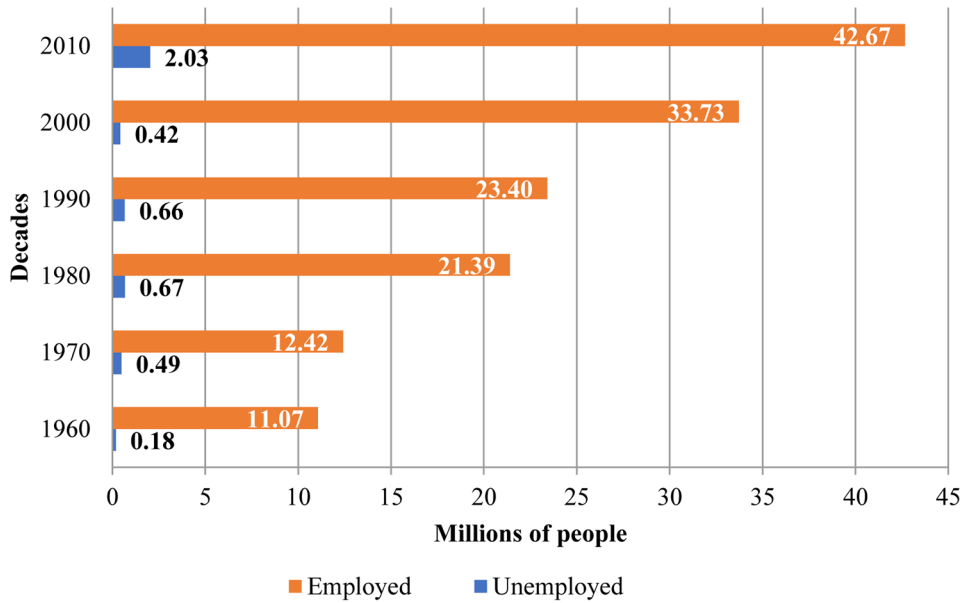


Table 1. Percentage of population aged 20-29 employed and unemployed

Year	Population aged 20-29	
	% Employed	% Unemployed
1960	27.38%	-
1970	28.88%	29.15%
1980	30.59%	25.92%
1990	32.13%	34.72%
2000	29.92%	39.05%
2010	26.10%	32.17%

Source: Produced by the authors and based on data on the economic characteristics of each population census of INEGI (1960-2010)

Note: The percentage of the unemployed economically active population (age 20-29) for the decade of the sixties could not be found.

period professions linked to ICTs are beginning to have greater demand in a labor market that reflects the technological changes of the fourth industrial revolution (i4.0). This is linked to the transition from an economy based on manufacturing to

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one based on innovation, but still far from it. We therefore find it recommendable to accelerate the transition from an industrial revolution i2.0 to another i4.0, but without neglecting the social and human sciences, a characteristic of a relationship between higher education and employment with a human face.

The table 2, shows seven main areas that concentrate the enrollment of professionals from the 1960s to 2010, that use to be connected depending of each highlight and argues in this paper. The order is shown from the bottom to the top, in increasing scale, indicating in the row to which decade belongs each group of professional areas. These are divided, by area of study highlighted by different colors, emphasizing that in some years, the information was found by specific sector or science as in the case of Medicine or Law belonging to Health Sciences and Social Sciences, respectively. (For more detailed information on the number of professionals within each study area per decade, see the appendix 1, 2).

Table 2. Professions with highest demand by decade

7°	Engineering in different branches	Architecture	Professional religious	Agronomy	Other professions	Services
6°	Chemical	Pedagogy	Exact sciences	Civil engineering	Natural and Exact sciences	Art and Humanities
5°	Administrative professions	Mechanical, electrical and electronic engineering	Engineering, Architectures	Mechanical and Industrial Engineering	Agricultural sciences	Natural, exacts and
						Computing sciences
4°	Law	Civil Engineering	Health sciences	Administrative	Health	Health
3°	Medicine	Law	Social sciences	Law	Education and	Education
					Humanities	
2°	General educations	Medicine	Education science	Medicine	Engineering and	Engineering, manufacturing and
					Technology	Construction
1°	Civil engineering	Accounting	Administrative sciences	Accounting	Social sciences and	Social sciences, Law and
					Administrative	Administrative sciences
	1960	1970	1980	1995	2000	2010

Table 3.

Social sciences	
Health sciences	
Education sciences (normal)	
Technology sciences	
Administrative sciences	
Exact and natural sciences	
Agricultural sciences	
Construction sciences (Civil engineering, architecture and related)	
Diverse engineering(no civil)	
Humanities and arts	

Source: Produced by the authors and based on data on Census of the Mexican Population 1960-2010 & Professions Atlas. 1995 INEGI

Highlight 3: Knowledge Society

Likewise, after 2000, during the first three five-year periods, the National System of Technological Education (SNET) changed. In 2014, by Presidential Decree was created the largest technological higher education institution in Mexico. The National Technological Institute of Mexico (TecNM) is a decentralized body of the Ministry of Public Education, which replaces the administrative unit that was in charge of coordinating the SNET. This was integrating the subsystem of higher education including training centers for capacity building; different types of higher secondary education institutions, with various modalities; technological institutes; the IPN; the Center of Technical-Industrial Education and several research centers.

The TecNM is constituted by 254 institutions, of which 126 are Federal Technological Institutes, 128 Decentralized Technological Institutes, four Regional Centers of Optimization and Development of Equipment (CRODE), an Interdisciplinary Center for Research and Teaching in Technical Education (CIIDET) and a National Center for Technological Research and Development (CENIDET). In these institutions, the TecNM serves a school population of more than 600,000 undergraduate and graduate students throughout the national territory, including Mexico City (gob.mx, 2019), jointly with graduates coming for Higher Educations, it is possible to understand the graduates' dimension facing to a labor market that used to be developing in Mexico (Figure, 3) .

After 2000, the necessity to consider knowledge as one of the economic factors in growth was already evident. UNESCO and other economies of the world began

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to consider vocational training, higher education, research, development and technological innovation as decisive elements of transition from production based on manufactures to the ownership of knowledge. Such skills could propitiate a reconfiguration of the world by the transfer of production process that requires a greater quantity of cheap labor, to the big developed cities, where a concentration of information, knowledge and intellectual property exists.

One more indicator that gives context to the relationship between higher education and employment is the number of young researchers in the National Research System (SNI) patronized by the National Council of Science and Technology (CONACYT). In this regard, it is worth mentioning that research in Mexico is carried out in public universities and financed to great extent with resources provided by the universities and CONACYT. That's why the young researchers are employed in different forms offered by these institutions, as is the case of the CONACYT professorships, implying the beginning of a scientific employment trajectory, but often criticized because of the weak labor protection.

Figure 7 shows that since the establishment of the SNI of CONACYT the number of researchers in higher education has been increasing steadily, despite the difficulty of access. Thus, we see how in the beginning (1984) SNI started with 1396 researchers and tis number was gradually increasing continuously reaching 27186 in 2017. (For more information, as the exact number of SNI researchers per year, see Appendix 3)

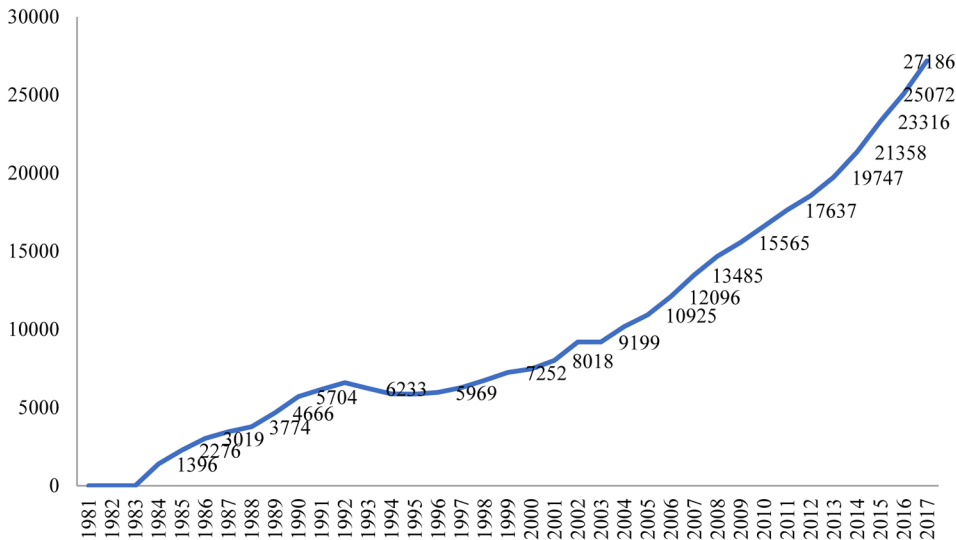
However, the new government of Mexico of Andrés Manuel Lopez Obrador has established a support for those young people considered as NINI's (neither study nor work), to whom he offers monthly scholarship type unemployment insurance, for a certain period but far still from the knowledge society. Hence the importance to nuance over time, public policies associated with the youth labor market, certainly in a period that does not offer still data. Variables and indicators are defined as we propose here, with the aim of contributing to a better knowledge of Mexico and the role of higher education for employment in general and of young people in particular.

CONCLUSION

A topic always relevant on the government agenda is that of employment and particularly of young people. Associated with its efficient and effective linkage with higher education, it provides a space for reflection, which from the academic perspective contributes to improving the conditions of an economically depressed Mexico, with ample opportunities for growth and development.

In the present research, it has been considered that in the face of the uncertainty that implies the transit from school to professional performance in the labor market

Figure 7. Number of researchers in the National System of Researchers of CONACYT
 Source: Produced by the authors with data from the historic archive and basic statistics of CONACYT (2017)



and the reality of lack of jobs coinciding with their aspirations, young people have been forced to accept jobs that do not correspond with their professional training, but also far from generating satisfactory income. This is a reality that affects the youth population in Mexico and serves as example for future generations of young people, shaping their career choice.

The foregoing is explained, largely by the global economic trends that influence the conformation of profiles that are demanded. This is the case of careers linked to ICTs and Mexico is not the exception. Nowadays, the economy/knowledge society places “ideas” as the main factor of production, substituting manufactures for mindfactures in the production processes of the fourth industrial revolution; where science and technological innovation take on a relevant role and therefore higher education institutions and research centers/institutes, in their relation to capital, give rise to an *ad hoc* interpretation of the relation between higher education and employment in the 21st century.

Thus, the relationship between vocational training and employment is a binomial that becomes increasingly complex, both from the perspective of the market and the public policy designed by the State. When distinguishing the unequal paths that each of them manifests and the different proposals in the different periods, it is necessary to develop proposals that foster their articulation, particularly for young

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university graduates, considering both the capabilities of the educational system and their social and economic needs, and centered on their professional life.

It happens that within the policies based on the needs of the economic system, university graduates are trained under a professional profile that responds to a disciplinary area, developing specific and general skills, ideally put into practice in the workplace. However, the general conditions in the labor market present tendencies to the precariousness of the labor relations, generally affecting the labor stability. In Mexico this process has its manifestation in the increase of the occupation in smaller economic units that require great support to offer favorable labor conditions.

Under a different policy approach, vocational and university training produces not only general and specific competences, but transversal to various fields of knowledge, which favors adaptability to changing circumstances and modifies the characteristics of employment. That is, not only the demand for work of companies tends to modify the educational system, but this also modifies the contents of jobs in companies. Thus, the supply and demand of jobs of graduates, as well as the public policies aimed at solving the problems generated by a link between higher education institutions and different sectors of society is part of the same formula that aims to explain and provide a solution to this relationship.

The situation is even more complicated when models from abroad are inserted in economic and social conditions with special characteristics, which often do not understand the suggested formulas. Such is the case of the Bologna agreements in the design of the educational programs of the Universities, for example, the decrease of the study times in the university (from five to four years, from 10 to 8 semesters). These formulas have the objective to reinforce the technical aspects of the study programs, reinforcing the experience of Mexico in the previous years. But nevertheless, failing to consolidate the relationship with the productive sector and thus have put the higher education in accordance with the needs of the economic context.

Thus, the inclusion of young people in employment, in accordance with the nuances provided over more than fifty years, suggest that economic policies aimed at generating employment, as well as the supply and demand of professionals in the labor market, are fundamental axes to promote the development of Mexico. In other words, the collaboration of the state and the market, in search for virtuous circles between education and employment, contribute to successful solutions for the employment of university graduates for an optimal economic and social performance.

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KEY TERMS AND DEFINITIONS

Graduate Students: That sector of population that finished higher education.

Higher Education: Higher education is the last phase of the academic learning process after the high school stage, focused at universities, colleges or technical training academy at a professional level.

Import Substitution: Also called import substitution industrialization, is a commercial and economic policy that advocates replacing foreign imports with domestic production.

Knowledge Society: Engine of the economy and social development through science and technology advances.

Labor Market: Is the relationship of the demand (employers) with the job offer (employees) at a certain price that is the salary.

Neoliberalism: Movement to update liberalism, which limits State intervention in legal and economic matters.

Research: Activity oriented to the obtaining of new knowledge and its application for the solution to problems or questions of scientific character.

Youth: Is the age that immediately precedes adulthood and is situated after childhood, aged between 21-29.

APPENDIX 1

Table 4. Number of graduated from universities and technological institutions in Mexico (1970-2011)

Year	Graduated
1970	21740
1975	52185
1980	69572
1981	78644
1982	85505
1983	96572
1984	98788
1985	103280
1986	106693
1987	117378
1988	115670
1989	115407
1990	118457
1991	139031
1992	147729
1993	140256
1994	146420
1995	173693
1996	191024
1997	372728

Source: Statistic Yearbook 1997. Scholar population on undergraduate level in universities and technological institutions. ANUIES.

Table 5. Concentration of enrollment by areas of professional study and / or most demanded employment at national level 1960-2010: 1960

Study Area	Civil engineering	Education in general	Medicine	Law	Administrative professions	Chemistry	Engineering in different branches
University enrollment	16 938	16 781	12 755	9 731	6 972	3 771	2 820

Table 6. 1970

Study Area	Civil engineering	Education in general	Medicine	Law	Administrative professions	Chemistry	Engineering in different branches
University enrollment	16 938	16 781	12 755	9 731	6 972	3 771	2 820

Source: INEGI. IXth General Population Census 1970. General Directorate of Statistics

Table 7. 1980

Study Area	Administrative Sciences/ Administrative professions	Education sciences	Social sciences	Health sciences, Medicine	Engineering, Architecture	Exact Sciences	Religious professionals
University enrollment	227 690	468 181	134 531	110 409	102 904	28 581	9 379

Source: INEGI. Xth General Population Census 1980. General Directorate of Statistic

Table 8. 1995

Study Area	Accountancy	Medicine	Law	Administration	Mechanical and Industrial Engineering	Civil and construction engineering	Agronomy
University enrollment	201 765	165 185	141 539	131 310	102 835	74 430	68 259

Source: INEGI. Atlas of professionals in Mexico, 1995

Table 9. 2000

Study Area	Social and administrative sciences	Engineering and technology	Education and humanities	Health	Agricultural sciences	Natural and exact sciences	Other diverse
University enrollment	2 470 708	1 550 486	1 156 098	644 226	215 402	118 024	435 404

Source: INEGI. XIIth General Population and Housing Census 2000. General Directorate of Communication

The tables show the number of populations within each specific area of study per decade. The tables from 1960 - 2010 except for 1980, show the population enrollment of professional study, while the 1980 shows the population registration of professional employment. The population registration of professional study refers to the population with some modality of higher education: partial studies

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Table 10. 2010

Study Area	Social sciences, administration and law.	Engineering, manufacturing and construction	Education	Health	Natural, exact and computer science	Arts and humanities	Services
University enrollment	5 328 839	2 442 784	1 584 379	1 032 292	936 938	557 100	334 420

Source: INEGI. General Population and Housing Census 2010. General Directorate of Communication

or finished (graduated), regardless of whether the person is working in the area of study. The population registration of professional employment shows the number of people who work in an area of professional employment, independently if they have any instruction.

Table 11. Number of researchers belonging to the National System of Researchers (SNI) of CONACYT per year from 1984 - 2017

Year	Researchers
1984	1396
1985	2276
1986	3019
1987	3458
1988	3774
1989	4666
1990	5704
1991	6165
1992	6602
1993	6233
1994	5879
1995	5868
1996	5969
1997	6278
1998	6742
1999	7252
2000	7466
2001	8018
2002	9199
2003	9199
2004	10189
2005	10925
2006	12096
2007	13485
2008	14681
2009	15565
2010	16598
2011	17637
2012	18555
2013	19747
2014	21358
2015	23316
2016	25072
2017	27186

Source: Produced by the authors with data from the historic archive and basic statistics of CONACYT