

Impact of family remittances and the Prospera program on high school students in Choix, Sinaloa, Mexico*

Impacto de las remesas familiares y el programa Prospera
en jóvenes de nivel medio superior en Choix, Sinaloa, México

Impacto das remessas familiares e do programa Prospera em jovens
de nível médio superior em Choix, Sinaloa, México

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Abstract

Objective: to establish the impact of family remittances from the United States and the "Prospera" welfare program for the high school student population in a community with high social exclusion and poverty in Sinaloa. **Methodology:** first, the population, economic and work activities in the community of Choix, Sinaloa

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were described. Then, the discussion on remittances and the beneficiary families of the Prospera program were characterized; finally, a survey was designed and applied to 114 high school students and families from Choix. **Results:** the findings showed that remittances do not stop school dropouts from high school students in Choix. Although, some of those students use family remittances and the Prospera program help for their education. The social program Prospera works as an incentive to the students' education. Family remittances are mainly used for family support. **Conclusions:** social assistance programs focused on poverty have been a visible trend. However, they do not tackle the problem at its root, but they make up macroeconomic indicators, which will continue with the same logic, such as: permanent discrimination and migration in those places, because public policy strategies will always emerge.

Keywords: Remittances; Influence on education; high school students; Migrant.

Resumen

Objetivo: establecer el impacto de las remesas familiares provenientes de Estados Unidos y del programa asistencial "Prospera", para la población estudiantil de bachillerato, en un municipio de alta marginación y pobreza de Sinaloa. **Metodología:** primero, se describió la población, actividades económicas y laborales del municipio de Choix, Sinaloa; luego, se caracterizó el debate sobre las remesas y las familias que son beneficiarias del programa Prospera; finalmente, se diseñó y aplicó encuesta a 114 jóvenes y familias del nivel medio superior de Choix. **Resultados:** se encontró que las remesas no detienen la deserción escolar de los jóvenes de bachillerato en Choix, aunque parte de los jóvenes, utilizan las remesas familiares y el auxilio del programa Prospera para su educación. El programa social Prospera ejerce un aliciente en la educación de los jóvenes. Las remesas familiares son destinadas principalmente a la manutención familiar. **Conclusiones:** los programas de asistencia social enfocados a la pobreza representan una tendencia visible. Sin embargo, no ataca el problema a fondo, sino que maquilla los indicadores macroeconómicos; éstos, seguirán bajo la misma lógica: una continua marginación y migración en dichas localidades, para lo cual surgirán siempre nuevas estrategias de políticas públicas.

Palabras clave: Remesas; Influencia en educación; Jóvenes; Migrante.

Resumo

Objetivo: estabelecer o impacto das remessas familiares procedentes dos Estados Unidos e do programa de assistência "Prospera" para a população estudantil do ensino médio em um município de alta marginalização e pobreza de Sinaloa. **Metodologia:** em primeiro lugar, a população, as atividades econômicas e laborais do município de Choix Sinaloa foram descritas; logo, caracterizou-se o debate sobre as remessas e as famílias que são beneficiárias do programa Prospera; Finalmente, foi desenhada e aplicada uma pesquisa para 114 jovens e famílias do nível médio superior de Choix. **Resultados:** achou-se que as remessas não detêm o abandono escolar dos jovens de ensino médio em Choix, embora parte dos jovens usam remessas familiares e o auxílio do programa Prospera para sua educação. O programa social Prospera exerce um incentivo na educação dos jovens. As remessas familiares são destinadas principalmente à manutenção da família. **Conclusões:** os programas de assistência social enfocados à pobreza representam uma tendência visível. No entanto, não atacam o problema completamente, senão que maquilham os indicadores macroeconômicos; estes vão seguir sob a mesma lógica: uma contínua marginalização e migração nestas localidades, para o qual surgirão sempre novas estratégias de políticas públicas.

Palavras-chave: Remessas; Influência na educação; Jovens; Migrante.

Introduction

The poverty and marginalization situation in Mexico and Sinaloa is becoming more extreme, problematic and confusing. This makes people seek other ways to survive due to the lack of opportunities in their living environment. (Pintor, 2015). Migration is one of these options for a segment of the population. (Durand, 2003), which generates more and better paid income. As Galbraith claims (1979) emigration is the oldest action to combat poverty. However, it is clear that not all those who emigrate or who receive remittances¹ have pulled themselves out of poverty.

This social phenomenon, emigration is generated by social, economic, cultural and psychological issues from those who migrate, generally because of unemployment and violence in their place of origin, at least in the case of Sinaloa in which this study is concerned. Besides, this State lacks regional development policies and, therefore, opportunities; rather, poverty generating structures persist. For example, the municipality of Choix, due to its remoteness from the valleys and the coast and poor access to communications has a low prevailing economic progress so, a region of remarkable poverty prevails.

As a result, the municipality has 50% of its population living in extreme poverty (National Council for the Evaluation of Social Development Policy [CONEVAL], 2012), while the other municipalities of Sinaloa have between 0% to 25% of extreme poverty in their population (CONEVAL, 2012). Choix is the poorest municipality in the state of Sinaloa and such economic conditions make most of its inhabitants leave the city in search of better opportunities, either to study or work in another city or in the northern neighboring country. This municipality suffers a significant loss of its population.

Remittances have attracted the attention of academic organizations and government authorities of the country. Regarding this, there is an old debate in the study of family remittances, which have been compared to social assistance programs in Mexico; for example, scholarships, pensions,

1 Family remittances, "are monetary resources that migrants get working abroad and then send them to their home country, are one of the most visible consequences of emigration in the nations in which it originates" (Arroyo, 2000, p.341)341). This flow is represented by remittances, which are classified into three: family remittances, remittances of transnational entrepreneurs and donations from humanitarian associations (collective remittances), as Portes (2005, p. 1058).The first play an important role in improving educational indicators, increasing revenues going toward health care, and a greater number of assets such as housing, land, household goods, etc.(Portes, 2005, p.1059).

unemployment insurance, among others. While these migrant resources and family remittances fulfill their purpose of keeping alive the functions of a family, as mentioned by Canales (2002), they represent a salary fund that, like any other, tends to be preferably used for daily and generation reproduction of the family and the community.

There are studies (García 2002/2003/2005; Moctezuma, 2012; Alejandro & Berumen, 2000; Adelman and Taylor, 1990; Lozano 2003, among others) that analyze the socioeconomic impact of remittances in Mexico. They show two trends: one that analyzes the potential of regional development in Mexico and the other one, less optimistic, that creates dependency, and its use mainly inhibits production, employment and the lavish spending of the beneficiaries of the remittances.

However, Mexican remittances constituted a strategic and central axis in the balance of payments² and its importance continues to be crucial within the local and regional context (Canales, 2008). In many cases, these transfers are the livelihood for many homes in Mexico. Canales (2002) states that these shipments are social and cultural forms that assume loyalty and commitment to the family of origin. In particular, in this process of migration and remittances, the central role assumed by family obligations and the presence or absence of direct relatives (mainly children) in places of origin and destination is highlighted (Lopez, 2001)³.

In another segment of the poor population in Mexico and Sinaloa, social assistance, such as "Prospera" program among others, of the Ministry of Social Development, SEDESOL (2015), aims to partially cover family deficiencies. Prospera, formerly called "Oportunidades"⁴, is the social program that

2 In 2016, for the first time in 15 years, remittances exceeded income from sales of crude oil between January and July remittances amounted to 14 billion 308 million, 17% more than what was captured by the sale of crude oil. Among the causes is the rise of the dollar, low growth in the country, inflation. *La Jornada* (Roberto González Amador), "EU remittances exceeded the income from oil exports", September 2, 2015.

3 According to Canales (1999), remittances resources are distributed among a large number of small amounts, which hardly correspond to the average wage of a worker in Mexico. Mostly for consumption, very little savings and productive investment; so that remittances are part of the economic base of home and regional labor stagnation.

4 The Progres, is the first name that this program had, was established in 1997. Since then, it has changed depending on the presidential term and the party in office, but the operating rules are similar. This base program articulates the institutional offer of social programs and social policy actions, and is addressed

provides the greatest number of scholarships and with a bigger monthly amount allocated. This is directed primarily to rural locations, although in recent years it has also been expanded to urban areas.

This article is about the use of family remittances in Choix's population, and it also establishes a comparison with Prospera program in a highly marginalized population in Sinaloa. It is expected that the trend in the use of family remittances and the use of the Prospera scholarship will follow the same course of investment: spending on housing, food, etc.

The work is articulated in order to answer the following questions: To what extent do the family remittances and the Prospera scholarship contribute in the education of young scholars from Choix, Sinaloa?, what is the socioeconomic profile of young people who study in middle school in Choix, Sinaloa? And what is the economic situation like in Choix, thus, young people keep on studying, think of working or migrating?

Methodology

The target population of the study is 670 students from institutions in middle school education of the Municipal Head of Choix. The strategy to collect data would be based on the randomness in the samples determined. Therefore, it was decided to apply the stratified random sampling, since the characteristics of the population under analysis are quite homogeneous. Thus, a similar probability of selection to each and every one of the samples was assigned, and these in turn were divided into subgroups, with the possibility of separate analysis (Vladimirogva and Gutiérrez, p.(2014).

The universe of this study was the population of high schools students from the Autonomia University of Sinaloa, UAS, and from the Colegio de Bachilleres of Sinaloa, COBAES. A random sample of 114 students was selected. The sample size to estimate the proportion can be calculated with this formula, which is defined as follows:

to the country's poorest population. Its goal is that families "overcome poverty status" (Canedo, 2016). Nationally, 26.9% Mexican homes receive support from a government social program, according to INEGI 2015 intercensal survey. In Oaxaca the figure is nearly 50%.

n = sample size, N = population;
 p = percentage of reliability; se = standard error.
 $N = 670$ students; $p = 0.95$; $se = 2\%$

$$n \geq \frac{\frac{p(1-p)}{(se)^2}}{1 + \frac{p(1-p)}{N}} \quad n \geq \frac{\frac{0,95(1-0,95)}{(0,02)^2}}{1 + \frac{0,95(1-0,95)}{670}}$$

$$n \geq \frac{118,75}{1 + \left(\frac{118,75}{670}\right)} = \frac{118,75}{1,1772} \geq 100.87 = 101 \text{ samples}$$

Results

Findings show that there are few advances derived from social assistance programs in Mexico. For example, from 1988 to date, the results of social policy in this country and in accordance with data from CONEVAL (2012), in 1992, 53.1% of the Mexican population lived in poverty. After the implementation of some programs in Mexico, this has just declined by over 1%. The same applies to family remittances that are ranked fifth in the world, but according to the World Bank (2015), they have not led to a decrease in poverty.

The families from Choix have the option to meet their needs of maintenance with family remittances and Prospera scholarship. These contributions enable them to meet the needs of education, health and housing improvement and at minimum degree their productive investment. However, Choix's young people assume remittances as a mere support, but not as an income for their education. They think their remittances are for their home maintenance, but it is not enough to cover their education. In fact, the support of Prospera scholarship is more important because this resource is less uncertain, since, i.e. they have the bank deposit insurance program every two months.

Now, on average, about \$ 300 per month reach migrants' families of remittances in Mexico (Lozano, 2002). This amount of money is similar to that of migrant families from Choix. From another point of view, the amount of Prospera scholarship is between \$ 30 to \$ 50 for high school education. Of this, 33% of surveyed students spend between \$ 25 and \$ 40 a month and 22% spends \$ 40 or

more. That is, young people from high school in Choix receive and allocate more money for education from the Prospera program than from any other resource. However, despite being a resource for education, 66% state they would continue to study if they did not have the scholarship; 34% of the students believe this support is vital for their education and without it they would not study.

86% of students considered to continue studying after finishing school, either in another municipality of the state or another city, since in Choix there are no academic institutions for higher level studies. 11% would go to work elsewhere (outside the municipality or outside the State). These two percentages add up to 97% of young people who are currently studying at high school and who think of emigrating for work or study. Their hope is tight and very uninspiring; for example, the survey showed that 47% of students noted few opportunities to get ahead in Choix and only 12% think that there are opportunities. This finding is important regarding life prospects because, unfortunately, Choix is an unattractive municipality, even for its inhabitants, due to patterns of high indicators of poverty and low social economic and labor development.

The municipality of Choix

Choix borders on the north with the states of Sonora and Chihuahua; on the east with the State of Chihuahua and the municipality of El Fuerte; on the south with the municipality of El Fuerte; on the west with the municipality of El Fuerte and the Sonora state. Its altitude above sea level fluctuates between 100 and 2200 meters (National Institute of Statistics and Geography [INEGI], 2011).

Map 1 Choix



Source: Taken from INAFED, 2010.

In 1990, the municipality of Choix had 26167 inhabitants and it slowly increased in the next two decades with a difference of 6831 inhabitants (INEGI, 2012). Thus, by 2010, the population of Choix reached 32998 people, a figure which brings together around 327 localities; each locality with a small population, fewer than 1500 inhabitants, except the municipal head whose population fluctuated between 5000 and 9500 inhabitants in 2010 (INEGI, 2011).

In this regard, the low population growth is due to the scarce or no dinamism among economic activities that allow for the retention of population with employment opportunities in its territory. It is clear that the location in the country is key to determine its regional position, but the economic and socio-cultural factors also determine its status (Durand, 2003).

Table 1. Inhabitants in the localities per decade.

| Localities | Decade | | | | | |
|------------------------|--------|-----|-------|-----|-------|------|
| | 1990% | % | 2000 | % | 2011 | % |
| Mpal head (Choix) | 5333 | 20 | 7320 | 25 | 9306 | 2.8 |
| other localities (327) | 20834 | 80 | 22035 | 7 | 22692 | 7.2. |
| TOTAL | 26167 | 100 | 29355 | 100 | 32998 | 100 |

Source: Prepared with data from INEGI, 1990, 2000 and 2010.

Table 1 depicts the low population growth of the municipality of Choix. The municipal head contains the majority of the population, as this represents 28% compared to 72% of 327 localities in 2010. This concentration of population is due to the municipal head having more public and private services, an increased urbanization and economic dynamism, although this locality is still mostly in rural and some urban conditions.

With respect to the other localities, they lack population, services and have little or no capability to access them. Bassols (1985) mentions that public investment is also oriented to economic sectors that are strategic to trigger growth, the same as the investment decision, where the territory is taken into account, the effect is benefited, in counterweight to many other areas that are abandoned by a lack of scope and failure of planning.

51.9% accounts for men and 48.1% for women of the population in the municipality of Choix. The abundant population of the municipality is aged 0 to 19 years, between men and women. Undoubtedly, the largest five-year age group is between 15 to 19 years. The other five-year age groups up to 20 are decreasing; that is to say, the older the population, the smaller the population composition.

In the same year, there were 7856 homes in the municipality (1.1% of the total homes in the state), Out of those homes, 1442 had women heads of family (0.8% of the total entity). The average size of family members in the municipality was 4.2 members, while in the state, the average size was 3.9 members. Regarding this fact, the low population composition entails a high social cost in terms of the benefits, and these are only for some people, and damages are socialized in the population (Rionda, 2008, p.19). Furthermore, the smaller populations of ten thousand people in Mexico have compensatory income to reach the minimum rate of welfare.

The 32998 inhabitants of the municipality of Choix represent only 1.2% of the population of the 18 municipalities of Sinaloa (INEGI, 2011). In this municipality there are more men than women, that is, for every 100 females there were 108 men and the median age is 24 years or less. There are 68 people in the bracket of age dependency⁵ (under 15 and over 64) per 100, 15 to 64 years), which are in age to work, that is, for every 100 working-age people, there are 68 economically dependent ones (INEGI, 2011).

In turn, Delgadillo and Torres (2005) show that the development of a population is implicitly determined on the understanding of the causes, origins, evolution and dimension of relevant social issues on justice, fairness, equality, and sustainability, such as poverty, exclusion, inequality, environmental degradation, exploration, exploitation, hunger, malnutrition, migration, territorial distribution with demographic and economic variables, to name a few.

The economically active population of the municipality is 44.6%, almost half of the population (of which 94.6% is occupied). 74.2% accounts for men and 12.5% for women. The total working population of men and women is almost 95%, while the unemployed population is 5.4%; This means that most of them are working-age people. (INEGI, 2011).

In the absence of supply, there is no demand. Thus, the livelihood strategy of rural workers are migrations to other rural areas, cities or international labor markets (Yúnez, Barceinas and Taylor, 2005). Because of the rural labor market, there is no open unemployment. The consequence of not maintaining formal labor market in rural areas is that farm workers have to incur transportation costs when they have to migrate temporarily for employment.

⁵ People in dependent ages are generally people under 15 and over 64 years of age, "economically productive" ages (between 15 and 64 years).

Table 2. Economically active population

| Population 12 or over | TOTAL | HOMBRES | MUJERES |
|-------------------------------|--------|---------|---------|
| Economically active | 44.60% | 74.20% | 12.50% |
| Busy | 94.60% | 94.30% | 96.40% |
| Unoccupied | 5.40% | 5.70% | 3.60% |
| Non-working | 54.90% | 25.10% | 87.10% |
| Not specified activity status | 0.50% | 0.70% | 0.40% |

Source: Prepared with data from INEGI, 2011.

Choix's population is mainly engaged in retail, with about 218 economic units. It employs about 283 people in the field of agriculture, fishing, hunting and forestry. As for agriculture, this area is important for the survival of families from Choix, crop type is mainly seasonal, since soil conditions do not allow an irrigation system. Major crops in the municipality are grass, sorghum, maize, beans, watermelon, sesame and groundnut (Valdez, 2013).

Regarding the primary sector, Yúnez and Barceinas (2006) suggest that the limiting factor of rural populations is their low technological development, the result of a scheme of rural economy, which operates in a rural society with poor market development. The limiting factor is not physical, but institutional. This rural economy is accompanied by the seasonality of wage employment, because the demand for labor for agriculture is seasonal (Yúnez and Barceinas, 2006).

Table 3. Economic activities of the families from Choix

| Economic sectors | Economic units | People working |
|---|----------------|----------------|
| Retail trade | 218 | 450 |
| Agriculture, livestock, forestry, fishing and hunting | 13 | 283 |
| Accommodation and food preparation | 61 | 164 |
| Mining | - | 144 |
| Other services except government activities | 69 | 112 |
| Manufacturing industries | 55 | 111 |
| Others | - | 217 |

Source: Data from municipal Monographs Choix, INEGI, 2011.

On public services in Choix, out of 100 people, 79 are entitled to public health or private services. 52% of the population has *Seguro Popular* (Social Security); 16.9% has IMSS (mexican institute of social Security), 10.6% has ISSSTE (The Institute for Social Security and Services for State Workers), about 20.6% does not have any type of social security. These figures are due to the majority of the population having no formal employment.

The educational level is low, the population aged 15 or older has basic education corresponding to primary and secondary. Only 16.6% of the population is educated to high school level and 11.3% is educated to a higher level of education. In 2010, the municipality had 80 preschools, 106 primary schools (two indigenous primary schools)⁶, and 30 secondary schools. In addition, the municipality had two high schools and a training school for work.

The traditional model of education in Mexico has not responded fully to the needs of rural areas. Communities show that the school educational process, does not qualify for the best use and does not promote the development of communities. On the contrary due to its pyramidal design, it fosters migration to urban centers where they offer all levels of school to pursue higher education (Tovar, 2008, p.64).

Table 4. Literacy rate by age group

| Literacy rate by age | % |
|----------------------|--------|
| 15-24 years | 98.40% |
| 25 years or more | 4.9% |
| Attendance by age | % |
| 3-5 years | 52.20% |
| 6-11 years | 98.10% |
| 12-14 years | 92.50% |
| 15-24 years | 40.70% |

Source: Prepared with data from INEGI, 2010.

⁶ In Mexico there have been changes related to the recognition of cultural and linguistic diversity at the national Constitution and several states have enacted a new federal education law and is moving into a federalization process basic and normal education that fosters the development of alternatives to address diversity in each state or regional context.

In Choix, 98.4% of the population between 15 and 24 years old can write. The study sample was conformed by high school youth who are in the age range of 15 to 24 years. Only 40.7% of young working-age people attend school, this is probably due to the fact that most of the population this age is working, and in the case of women doing housework. Notably, according to Tovar (2007), "rural communities are offset in Mexico two years on average" (p 12); although the government has tried to intervene in education, building schools, from pre-school to uppersecondary level; thus educational opportunities grow, but its quality diminishes. The effort made to provide education is not compensated in educational quality.

Welfare assistance and international migration in Choix

The population stands out for its extreme poverty, as 50% of its population is in this situation and 25% in poverty. These results are derived from the Social Deprivation Index. This means that it lies below the minimum welfare. People in this situation have such low income levels that, even if the income they receive is entirely designated to purchase food, they could not acquire the necessary nutrients for a healthy life (CONEVAL, 2012).

Choix is the only municipality in Sinaloa that has a level between 50% and 75% of incomes below the minimum welfare. This fact is associated with the ICP (Extreme Poverty Index). This is also the only municipality that has the highest rates in this index. Due to this situation, several mechanisms to support poor families intervene in Choix. For example, brigades against hunger and social assistance programs, such as the one discussed in this research: the Prospera Program.

Regarding the support of the Prospera Program in Choix, in October, 2014, it was reported that more than 45 million pesos in payment of the last two months of 2014 (Municipality of Choix, 2014) were delivered to more than 5500 families.

Meanwhile, in another segment of the population that, generally, lives in rural communities with the highest rates of poverty, the culture has been to migrate to the north: United States, that is the international destination of people from Choix. This municipality is part of the so-called other Sinaloa:

The other Sinaloa is a State that has been forgotten and rarely appears in statistics of official achievements. In its areas, there are no significant economic activities

or institutional support that allow its inhabitants to have a decent life. The following are the municipalities whose population is mostly in the mountains: Choix and Badiraguato (northeast region), the municipalities of Cosalá (central region) and San Ignacio and Concordia (southern region) (Lizárraga, 2003, p.39).

These municipalities are characterized by fostering migration. Through the Population Growth Rate⁷, to what extent the municipality is involved in sending its inhabitants to other parts of the state, nation or other countries can be seen.

Table 5. Municipality of Choix ICP

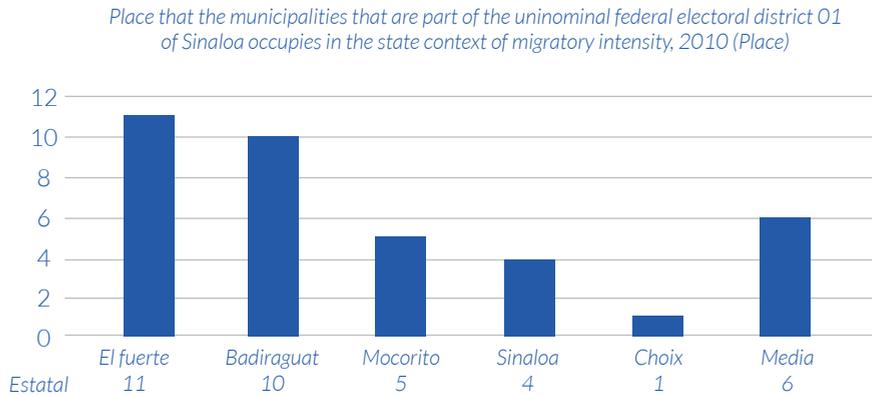
| ICP PER DECADE OF CHOIX | | | |
|-------------------------|-----------|-----------|-----------|
| 1970/1980 | 1980/1990 | 1990/2000 | 2000/2010 |
| 1.9% | -2.2% | 1.15% | 1.17 % |

Source: prepared by the authors based on ICP data and formula (Lizárraga, 2010).

This table shows the development of the ICP for every ten years. It can be observed that from 1970 to 1980 the result is positive at 1.9%, in the next decade the numbers were negative with -2.2%, and between the last two decades the percentage of this indicator has remained between 1.15 and 1.17%. In all these decades the results are below the state (1.8) and the national (1.7) average (Lizárraga, 2010). This means that Choix has a loss in its population, which can be attributed to the phenomenon of migration.

⁷ This index (not rate) relatively allows to know more accurately the rate of growth of the population in a given period. It is much more accurate than a growth rate. When the ICP of a region is greater than the average (ICP) at a national or state level (as applicable) it is possible to ensure that there is immigration; when it is lower than the national or state average, it is possible to ensure that there is emigration.

Gráfica 1. Intensidad migratoria



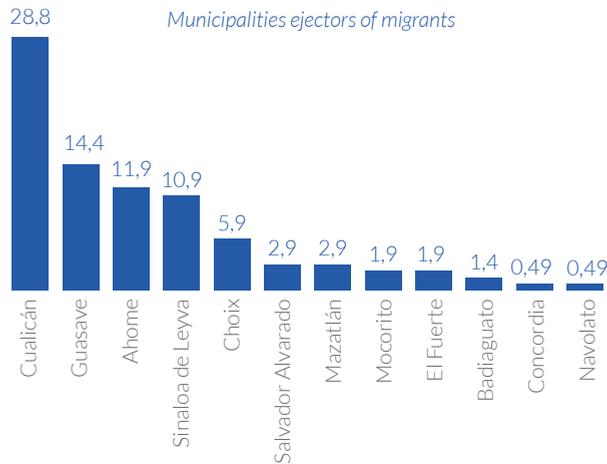
Fuente: Cámara de Diputados. LXII Legislatura con información de CONAPO (2008).

In short, it is clear that the growth or decline of population in some cities and regions are linked respectively with poles of strong attraction or rejection of the population. It is also evident that a rich rural exodus found accommodation in urban areas. All that can be stated so far is that in parallel with the growth of large cities, the number of rural areas has declined.

According to the Chamber of Deputies of the LXII Legislature, a municipality has a very high degree of intensity immigration if the place in the national context tends to 1 and it will have a very low degree if it tends to 2500. The graph shows that the following municipalities: El Fuerte, Badiraguato, Mocorito and Sinaloa have a low degree of migration intensity. They are placed between 1489 to 1171 (in terms of the country's municipalities) in the national context. Instead, Choix has an average degree of migration intensity and it ranks 929th in the national context (Center for Social Studies and Public Opinion [CESOP], 2004).

In 2005, Valenzuela analyzed the presence of people from Sinaloa in Phoenix, Arizona. It showed that Choix has a significant participation in migration processes, unlike other municipalities in the State. This is evidenced in Graph 2.

Graph 2. Municipalities ejectors of migrants



Source: taken from Valenzuela (2005).

5.9% of migration in Sinaloa found in Phoenix, Arizona in 2003, was from Choix (Valenzuela, 2005). It ranks the fifth after Culiacan, Guasave, Ahome and Sinaloa de Leyva. It can be stated that this percentage corresponds to the first three municipalities due to its population size. The next one is a poor municipality: Sinaloa de Leyva, that has the same characteristics of poverty and lack of opportunities, similar to the municipality of Choix (Sánchez , 2015).

Numerous rural communities in Mexico, such as people from Choix, learned that the success of small farmers is also achieved when some members of the family are sent to the other side of the northern border, as Glendhill (1995) states; from this, a pattern of behavior that fosters social networks (Painter and Sánchez, 2012) is generated. Thus, the economic scope is expanded, which allows them to send home a considerable sum in remittances to develop agricultural activities. In this case, international migration was systematized in many rural parts of the country (Corona and Tuirán, 1998), as happened in Choix.

Part of this exodus of people from Choix is due to fact that in the early eighties a crisis in the agricultural fields of Sinaloa began, which has been reactivated and has caused that much of the population of this municipality to continue to migrate year after year. Migration also increased thanks to the existence of social networks, thereby increasing the migration in Choix alongside the emergence of new destinations such as Phoenix, Arizona, where existing destinations will have a significant increase, such as the border city of Tijuana. The same situation occurs in Mexicali, which is a city with a

considerable settlement of Choix's migrants from the decades of the eighties and nineties.

It is important to emphasize that while the metropolitan area of Los Angeles has been one of the main destinations of this transnational circuit, the migrants from Choix in Arizona (Phoenix and Tucson), gradually will move to Tijuana and Los Angeles, but also to new destinations, as Pintor (2015) argues in the destinies of people from Sinaloa.

In addition to the existence of a migratory culture, which was generated during the successive economic crises in agriculture, that took place in Mexico from the eighties, a pattern of migratory behavior supported by migration networks was formed; so, the household economy increased thanks to the remittances. This economic strategy allowed for the construction of transnational migratory circuits, supported by networks of people and the region. These networks make migration more attractive to young people. Every new migrant expanded the network and transfer costs and risks were reduced.

For people from Choix, the existence of remittances to help their families has raised some government's optimism⁸. As Carling (2007) noted, the magnitude of income sent by migrants constitute "the centrality that remittances on the agendas of the dominant institutions in the field of development were acquiring" (p. 51). For them, a shift began to take shape toward the field "more optimistic of the potential impact they could have" (Reyes, 2003), where some of that optimism was based on the new concepts of division between consumption and investment. In particular, part of the remittances that was spent on health and education was increasingly seen as an investment in human capital.

In Choix, remittances are double-edged sword; on one side, they generate a very conformist and dependent behavior on those who receive it. Only some of the receivers really exploit it and have a more productive use of these remittances. In this regard and in the same vein, the commissioner in Mexico of the UN Population Fund, Aries Hoekman (cited by González, 2015) notes that these remittances "are working as a brake to the local development, people prefer using the money to buy their groceries at stores and, suddenly, they begin to neglect their gardens and family farms". His words coincide with several analysts like Canales (2002/2008) and Lozano (2003), as well as with organizations such as ECLAC (2000), who suggest that remittances generate

8 For further information on such optimism, read Sanchez Garcia and Painter (2015).

a very pernicious dependence on families that receive them: "Only a small proportion is directed to investments, such as improving or acquiring a house, or the establishment of a small business" (Durand, 1988)⁹.

The impact of remittances and the scholarship Prospera on high school students in Choix in the 2014-2015 school year

There is a homogenization in the population studied in this research, as they are young people (economic dependents) belonging to a vulnerable strata. The students surveyed are mostly women with a percentage of 57%; a 43% corresponds to men. The age for both genders is between 15 and 19 years, with a mean of 16 years (53%), so it did not represent difficulties for the analysis.

As a first analysis, it is found that 40% of students do not have any support, 39% of them are beneficiaries of the Prospera scholarship, 18% of them have both supports and only 3% of them just have family remittances. This highlights the importance of both. However, more coverage is needed and it is also necessary to encourage the development of human capital in the municipality.

The use of remittances by the total surveyed students has been mainly used for food (37%); in second place, for education (26%); third, for health expenditures (17%), fourth, for home improvement (15%) and as a last resource, the resources have been used for productive investment (5%). Coinciding with what Reyes (2003) states in his study, remittances that were spent on health and education were increasingly seen as an investment in human capital.

On the other hand, the resources of the Prospera scholarship is mostly spent on food (32%), education (27%), health expenditures (20%), and housing improvement (14%) and as a last resource, it is used in productive investment (7%). These results are similar to the National Survey of Northern Border Emigration to the United States (ENEFNEU)¹⁰, which, despite its limitations, found that 70% corresponded to current expenditure of households (food, clothing, rent); 8.80% corresponded to durable goods; 8.57% corresponded to housing payment (new or improvements); 8.57% corresponded to payment of debts; and only 0.34% was used for investments (acquisition of capital assets

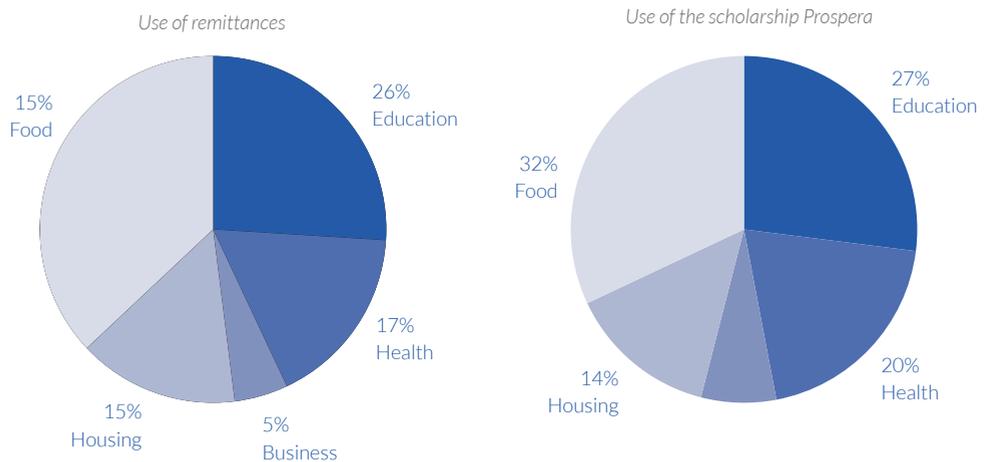
⁹ The evidence suggests that members of beneficiaries families have fewer incentives to seek other sources of income. They perceive remittances as a substitute, not as a complement. The resources are aimed at family support, not at the creation of a patrimony.

¹⁰ The evidence suggests that members of beneficiaries families have fewer incentives to seek other sources of income. They perceive remittances as a substitute, not as a complement. The resources are aimed at family support, not at the creation of a patrimony.

and businesses or land purchase). A 3.28% did not know how they spent the money (Zárate, 2003, p. 68).

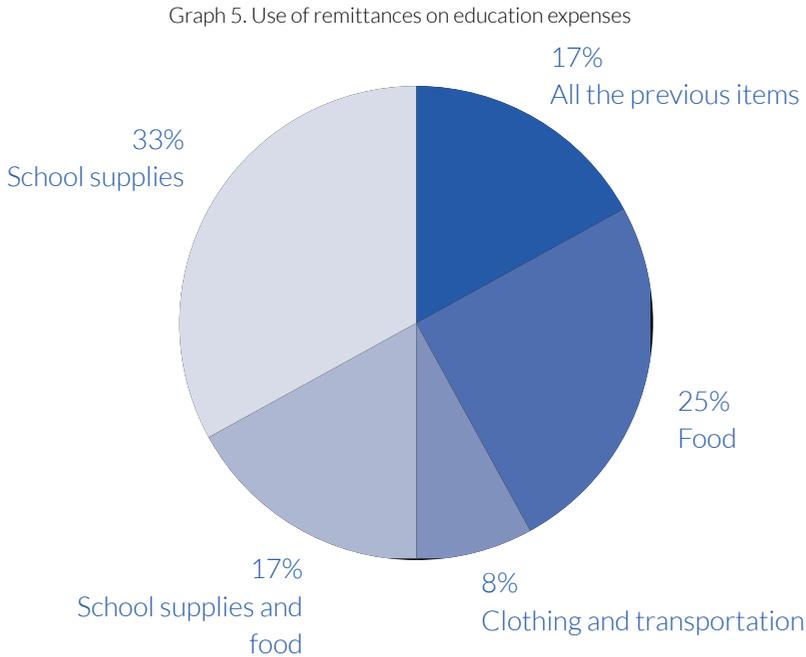
This fact indicates that in Choix, remittances and the scholarship Prospera are not multiplier channels, as it is thought, but serve as salaries, as Lozano (2003) argued. With regard to remittances, Canales (2003) states that although remittances are invested "in direct consumption, generate few direct multiplier effects because they create a renewed demand for goods and services produced locally; Moreover, in terms of consumption, they tend to be spent in major urban centers. It is little what is spent in communities of origin" (p.3). There is little investment in businesses, as both amounts are low. Additionally, the economic environment of the municipality is characterized by the lack of economic dynamism in the markets, which does not foster the development of business (Montoya, 2007).

Graphs 3 and 4. Use of remittances and the scholarship Prospera in current household expenditures



Source: prepared by the authors based on data from the questionnaire conducted for this research.

38% of respondents (mostly) say they spend between \$30 and \$50 a month for education at the high school level; 37% spend less than \$30. This means that the two majorities correspond to a 75% of respondents with an expenditure of less than \$50 a month on their education. This reflects that the vast majority of students who receive remittances are not supported significantly at school, since these remittances are basically aimed at family support.



Source: prepared by the authors based on data from the questionnaire conducted for this research.

Regarding the use of remittances in education, 33% is used on school supplies, 25% on food within the school day; the rest of the remittances is spent in other needs such as school clothing and transportation. This is the reason why remittances that support education are few, due to the fact that they do not meet the needs of students. But these resources beyond money sent, as Moctezuma (2011) says, they are "instrumental actions that are moved through affective actions" such as "make my home", "save money to get married", "have a professional in the family" (p. 39), etc.

While in the case of the Prospera scholarship, 67% of respondents has it. 21% said that besides remittances, their parents work and 12% said that they have the scholarship and also the income from their parents. This is a relatively high proportion, since, according to data from CONEVAL (2012) in Choix, more than half of young people in school are supported by the federal government to study at high school level.

As remittances, although a greater extent, the resources of the Prospera scholarship are spent on direct consumption, or for upkeeping the home.

However, it is important to differentiate their uses in household expenditures and uses in education of the young.

Conclusions

It is concluded that the granting of scholarships and remittances may not have the expected productive effect if these regions continue being part of an institutional environment that does not encourage small investment and savings in communities with high rates of marginalization.

It is also concluded that the scholarships, such as the Prospera program and the support of family remittances have a positive effect, as they are sources of help for the population; the nature of these resources is to have life strategies or family support. However, they have little impact if they are totally used for this purpose and not for the human capital development of young people.

Scholarships are not addressed to all of the vulnerable population; for instance, according to the National Survey of Household Income and Expenditure (ENIGH, 2010), the results are regressive; that is to say, people with a higher income are receiving the most significant amounts of transfer of resources through this modality (Cañedo, 2016).

Finally, we can say that both remittances and the Prospera scholarship, somehow are an approach for help and find channels that allow youth activities to continue being carried out. Therefore, although both resources (the Prospera scholarship and remittances) do not cause development or visible progress in the community, at least, they soften the poverty experienced by each individual who received a benefit from any of these ones.

Remittances constitute an individual strategy and home for migrants. Their impact can be much more understood in a social and familiar context than in local and regional economic terms. Welfare has generated even more factors that perpetuate and deepen the backwardness of the towns, as entrepreneurship and strategies for local and regional development are discouraged. What could really change the social backwardness and poverty of communities is a new approach to social welfarism by having true public policies -not only "migration" policies-, with greater emphasis to address the structural basis of poverty such as in the community of Choix.

References

- Adelman, I. y Taylor, J. E. (1990). Is Structural Adjustment with a Human Face Possible? The Case of Mexico. *Journal of Development Studies*, 26(3), 387-407.
- Arroyo J. y Berumen, S. (abril, 2000). Efectos subregionales de las remesas de emigrantes mexicanos en Estados Unidos. *Comercio Exterior*, 50(4). México.
- Ayuntamiento de Choix, Sinaloa (2014). *Monografías Municipales*. Choix, México: INEGI.
- Bassols, A. (1986). *Recursos naturales. Nuestro Tiempo*. México
- Cañedo, A. & Ramírez, J. (2016). Con Prospera tendrán más oportunidades. *Animal Político*. Recuperado de: <http://www.animalpolitico.com/blogueiros-tanque-pensante/2014/09/24/con-prospera-tendran-mas-oportunidades/>
- Canales, A. (1999). Periodicidad, estacionalidad, duración y retorno. Los distintos tiempos en la migración México-Estados Unidos. *Papeles de población*, (22). Nueva época.
- Canales, A. (2002). El papel de las Remesas en el balance ingreso-gasto de los Hogares. El caso del Occidente de México. En J. Arroyo et. al. *El Norte de todos: Migración y trabajo en tiempos de globalización* (pp. 148- 179). U. de G-UCLA, México
- Canales, A. (2003). Las remesas de los migrantes: ¿Fondos para el ahorro o ingresos salariales?, G. A. Zárate. *Remesas de los Mexicanos y centroamericanos en Estados Unidos* (pp. 97- 128). México: CIESAS-COLEF.
- Canales, A. (2008). *Vivir del norte. Remesas, desarrollo y pobreza en México*. Consejo Nacional de Población, CONAPO.
- Canales, A. (2015). El Debate sobre Migración y Desarrollo. Evidencias y aportes desde América Latina. *Latin American Resarch Review* 50(1), 29-53.

Pintor Sandoval, Renato, Peraza Noriega, Brianda Elena y Heredia Trasviña, Karen Olivia (junio, 2017). Impacto de las remesas familiares y el programa Prospera en jóvenes de nivel medio superior en Choix, Sinaloa, México. *Ánfora*, 24(42), 19-43. Universidad Autónoma de Manizales. ISSN 0121-6538.

- Carling, J. (2007). *Interrogar a las remesas: preguntas centrales para reflexiones más profundas y políticas más adecuadas*. En S. Castles y R. Delgado (Comps.) *Migración y desarrollo: Perspectivas desde el sur*. México: Porrúa,
- Centro de Estudios Sociales y de Opinión Pública, CESOP (2004). *Migración y Remesas Familiares: Conceptos y Perspectiva comparada*. *Centro de Estudios Sociales y de Opinión Pública*, Cámara de Diputados, 35. México. D.F.
- Consejo Nacional de Evaluación de la Política de Desarrollo Social, CONEVAL (2012). *Medición de la pobreza 2010*. Recuperado de: <http://www.coneval.gob.mx/Medicion/MP/Paginas/Medicion-de-la-pobreza-municipal-2010.aspx>
- Corona R. (1998). *Emigración, Remesas y desarrollo*, *Centro de Investigación y análisis de la economía regional*. Zacatecas: UAZ.
- García, R. (2002). *Migración agricultura y desarrollo*. Zacatecas: UAZ.
- García, R. (diciembre, 2003). Los Proyectos Productivos con los emigrantes en México, Hoy. *Revista Arenas, UAS*, (5).
- García, R. (2005). *Comunidades transnacionales México-Estados Unidos*. Circuito Zacatecas-Estados Unidos. (Texto inédito, Doctorado en Estudios del Desarrollo de la Universidad Autónoma de Zacatecas).
- Galbraith, J. K. (1979). *The nature of Mass Poverty*. Boston: Harvard University Press.
- Glendhill, J. (1995). *Neoliberalismo, transnacionalismo y pobreza rural*. Boulder, Westview Press.
- Instituto Nacional de Estadística y Geografía, INEGI (2010). *Encuesta Nacional de Ingresos y Gastos de los Hogares, ENEIGH, 2010*. México: INEGI
- Instituto Nacional de Estadística y Geografía, INEGI (2011). *Censo de Población y Vivienda 2010*. México.
- Instituto Nacional para el Federalismo y el Desarrollo Municipal, INAFED (2010). *Mapas*. Recuperado de: <http://www.inafed.gob.mx/work/enciclopedia/EMM25sinaloa/municipios/25007a.html>

Pintor Sandoval, Renato, Peraza Noriega, Brianda Elena y Heredia Trasviña, Karen Olivia (junio, 2017). Impacto de las remesas familiares y el programa Prospera en jóvenes de nivel medio superior en Choix, Sinaloa, México. *Ánfora*, 24(42), 19-43. Universidad Autónoma de Manizales. ISSN 0121-6538.

- González, R. (septiembre, 2015). Las Remesas de EU superaron el ingreso por exportación petrolera. *La Jornada*, 2015.
- Lizárraga, A. (2003). *El mapa migratorio sinaloense*. (Ponencia ante la Comunidad Sinaloense de Los Ángeles, el 7 de mayo de 2003).
- López, F. (2001). *Asociación de migrantes y desarrollo local. Programa Estrategias de los Hogares rurales con acceso a recursos naturales colectivos*. California: SDAR/FAO- UCLA.
- Lozano, F. (agosto, 2002). Las migraciones internacionales en América Latina y el Caribe. *Secretaría Permanente del SELA*, (65).
- Lozano, F. (octubre, 2003). Discurso Oficial, Remesas y Desarrollo en México. *Migración y Desarrollo*, (1), 23-43.
- Moctezuma, M. (2012). *La transnacionalidad de los sujetos*. MA. Porrúa, México.
- Montoya, E. (2007). Negocios remeseros en Gabriel Leyva Solano una localidad sinaloense de reciente migración. *Migraciones Internacionales*, 4(2).
- Pintor, R. (2015). *El Otro Agua Verde Sinaloa. Procesos transnacionales migrantes*. UAS, Sinaloa, México.
- Pintor, R. y Sánchez E. (junio, 2012). Repensar a Sinaloa como Estado emergente de migración mexicana. *Ánfora*, 19(32), 137-156. Universidad Autónoma de Manizales.
- Portes, A. (2005). Convergencias teóricas y evidencias empíricas en el estudio del transnacionalismo de los inmigrantes. *Revista Migración y Desarrollo*, (4). México, D. F.
- Rionda, J. I. (2008). *Desarrollo regional y urbano en la reestructuración económica de México, 1980-2006*. Universidad Autónoma de Guanajuato, Guanajuato.
- Reyes, T. M. (2003). *La importancia de las remesas en la economía mexicana y sus efectos en los hogares del país, 1990-2003*. México: Cámara de Diputados

Pintor Sandoval, Renato, Peraza Noriega, Brianda Elena y Heredia Trasviña, Karen Olivia (junio, 2017). Impacto de las remesas familiares y el programa Prospera en jóvenes de nivel medio superior en Choix, Sinaloa, México. *Ánfora*, 24(42), 19-43. Universidad Autónoma de Manizales. ISSN 0121-6538.

- Sánchez, E. (2015). *Migración y redes sociales: Continuidad y ruptura en las trayectorias laborales de Sinaloenses en California*. USA-Juan Pablos editores, Sinaloa, México.
- Sánchez, E., García, I. y Pintor, R. (diciembre, 2015). Revisión crítica de los programas de coinversión entre comunidades migrantes transnacionales y los gobiernos federal y locales en México. *Revista IDENTIDADES*, 5(9).
- Secretaría de Desarrollo Social, SEDESOL (2015). *Programa Prospera*. Recuperado de: https://www.prospera.gob.mx/Portal/wb/Web/funciones_prospera
- Taylor, J. E., Yúnez, A. Barceinas, F. y Dyer, G. (2005). Transition policy and the structure of the agriculture of Mexico. En K. M. Huff, K. Meilke, R.D. Knuston, R. F., J. Ochoa y A. Yúnez (Comps.). *North American Agrifood Market Integration*.
- Tovar, M. P. (2007). *Estudio sobre la educación para la población rural en México*. CONAFE, México.
- Yúnez, A. y Barceinas, F. (2006). Changing Structure of Mexico: Political, Social and Economic Prospects. En L. Randall (Comp.). *The Reshaping of Agricultural Policy in Mexico*. Londres, Inglaterra: Ed. Sharpe.
- Valenzuela, B. (2005). *Del sueño americano al despertar sinaloense*. Sinaloa, México: Universidad Autónoma de Sinaloa- Gobierno del Estado de Sinaloa.
- Valdez, F. (2013). *Desarrollo Regional y Desigualdad Económica en el Norte de Sinaloa*. Mazatlán, México: Universidad Autónoma de Sinaloa.
- Vladimirogva O. y Gutiérrez, E. (2014). *Probabilidad y Estadística: Aplicaciones a la Ingeniería y Ciencias Básicas*. México, D.F.: Grupo Editorial Patria.
- Zárate, G. (2003). Consumo y migrantes mexicanos y las remesas que envían. En G. A. Zárate. *Remesas de Mexicanos y Centroamericanos en Estados Unidos: problemas y perspectivas*. México: CIESAS-COLEF.