

The Company Newsletter for Supply Chain Finance.

# E FACTOR NETWORK NEWSLETTER

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eFactorDiez S.A.P.I. de C.V.  
Sociedad Financiera Objeto Múltiple E.N.R.

## Company News and Highlights

Supply Chain Finance Solutions for Cash Requirement.



Fintech products and market development based on Fundamentals of Economic Theory and Financial Risk.



## REGIONAL OVERVIEW OF THE STAGNATION OF ECONOMIC ACTIVITY IN MEXICO.

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### Synthesis.

This note studied the economic performance of states around mid-2019, we conclude that:

- The state outreach rates we build reflect and anticipate the shifts in economic activity. In the period under review, they are consistent with all the recessions presented by the country, with the exception of a false positive
- Currently, the indices are in the contraction phase, which foreshadows a likely recession
- However, 14 out of 32 states still grow, hence the regional landscape looks very uneven

### Analysis.

The gross domestic product (GDP) growth figures for the third quarter were recently published, and the Mexican economy has shown quarter-to-quarter growth declines with deseasonalized numbers, and that, in terms of Mexico's economy did not grow in the first nine months of 2019 compared to the same period in 2018. The objective of this note is to introduce the regional dimension through the growth of states to map the current stagnation presented by the national economy.

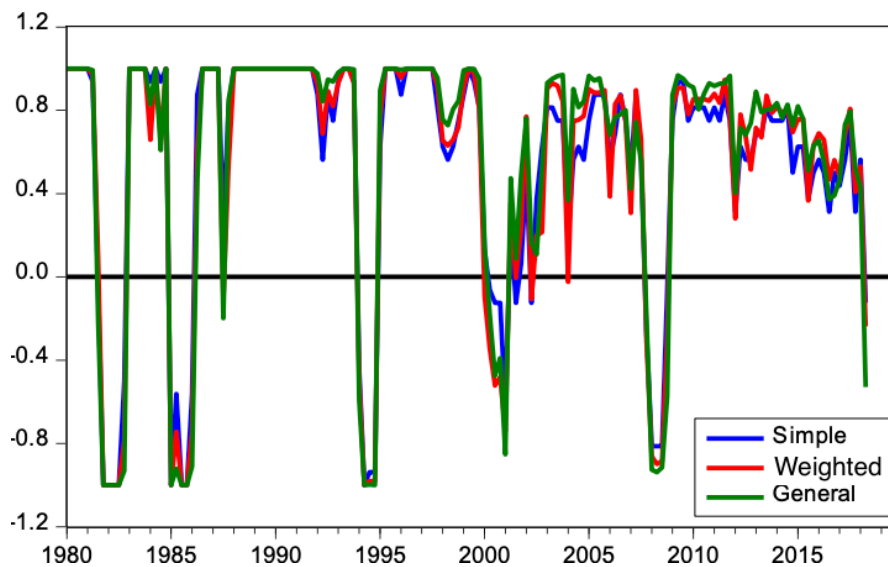
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For this purpose, we use the Quarterly Indicators of State Economic Activity (ITAE) produced by INEGI. Through these indicators we can analyze state economies more opportunity, since state GDP is published only on an annual basis and with a major lag. The most recent information is for the second quarter of 2019.

Based on ITAE we build three rates of dissemination of state activity. Broadcast indices are indicators that reflect whether the economy as a whole is growing or declining. The first index is to only subtract the fraction of the growing states that are degrowing, we call it simple diffusion index (SDI). The second corresponds to the detracting the

weight of the states that grow less the weight of those that decrease, it is basically the IDS but by weight by the weight that it has in domestic production, this indicator we call the Weighted Broadcast Index (WBI). Finally, we build one where we subtract the product of the weight by the growth rate of the states that are growing, we refer to the General Dissemination Index (GDI). The three diffusion rates vary in the range of -1 to 1, -1 indicates that all state economies decrease, 1 happens when they all grow. If the indices are positive then the national economy is in a growth phase, if they are negative in a degrowth phase. Figure 1 presents the evidence for the period 1981 (1 quarter) to 2019 (2 quarter).

Graph 1  
Diffusion indices of the Quarterly Indicators of Economic Activity State (ITAE)



Source: Produced by authors with information from INEGI

The diffusion indexes change in very similar form, so that the three reflect the economic activity of the country. Be evident how in all the recessions that the country presented from 1980 they are reflected faithfully in the graph. Namely in the recessions of 1982, 1986, 1995, 2001 and 2008, the indexes became negative; at the deepest points of these recessions the indexes reached, in all cases, their minimum value of -1. Additionally, indices quickly move from 1 to negative ground in a few quarters before recessions occur.

For example, since the 2quarter of 1981 the indices began to decline, the same is true in 1985 and the quarters prior to the recessions. That is, these indices produce early alarms of subsequent recessions, with only a false positive, which occurred in late 1987.

In the second quarter of this year, the three indices became negative, -0.125 for Simple, -0.24 for Weighting and -0.53 for the General. This confirms that the Mexican economy is in the process of decline, although the phenomenon is still not widespread to all states. Table 1 presents the panoramic overview of regional growth in few indicators.

Thus, 14 states were still growing at an annual rate in the second quarter, while 18 declined. The growth rate of growing states was 1.1% and ranged from 0.1% (Veracruz) to 4.1% (Tlaxcala), contributing to growth of just 0.4% among all of them. In contrast, those who declined did so at an average rate of -2.3%, between a range of -0.4% (Querétaro) and -10.3% (Tabasco), among all the states that decline, push the national economy down by 1.4%.

Table 1  
Characteristics of the states that continue to grow and those that decline in 2019

	States that	
	Grow	Decrease
<b>States</b>	<b>14</b>	<b>18</b>
<b>Minimum</b>	<b>0.1%</b>	<b>-10.3%</b>
<b>Median</b>	<b>1.1%</b>	<b>-1.6%</b>
<b>Weighted Average</b>	<b>1.1%</b>	<b>-2.3%</b>
<b>Maximum</b>	<b>4.1%</b>	<b>-0.4%</b>
<b>Contribution</b>	<b>0.4%</b>	<b>-1.4%</b>

Source: Produced by authors with information from INEGI

**Implications for the Fintech Sector.** It is common for us to overlook the regional dimension of the growth of national economic activity. However, currently the economic dynamics are very disparate between states, just a little more of the entities are in sharp decline, highlighting the economies of Tabasco and Baja California Sur due to their steep declines. Other cases have moderate declines, but in very large states, such as Mexico City and the State of Mexico, which between the two involve a negative contribution of half a percentage point of the country. In contrast, other states such as Chihuahua, Jalisco and Nuevo León continue to grow. Although the country as a whole is stagnant, there is an unequal distribution of economic dynamics at the state level, hence it is important to consider the regional dimension in the design of fintech's penetration strategies, as well as in the evaluation market potential.