

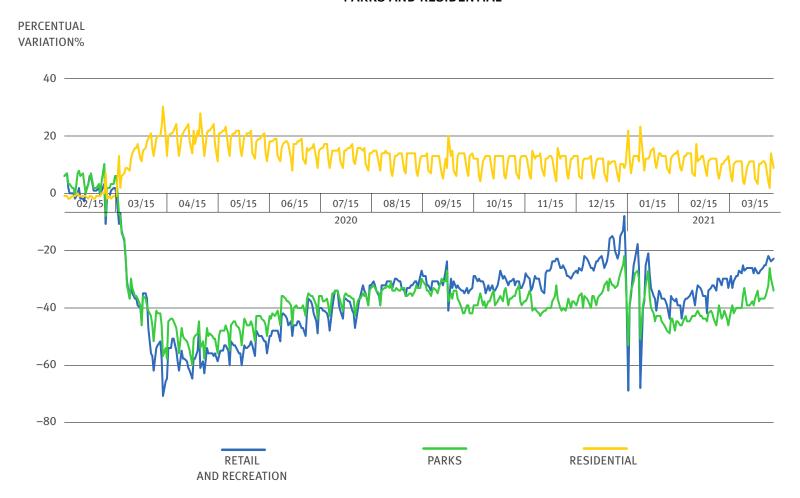
Economic impact on TOURISM sector

TOURISM SECTOR TO INTENSIVE CARE

The sanitary crisis impact has permeated the business environment in tourism through its different economic activities. This situation is caused by the activities related mainly to services demanding physical presence and people mobility (both providers and petitioners). The mobility in department stores decreased 71% (April 10th, 2020) in the most critical moment of the pandemic, while the decrease in parks shrunk 60% (April 26th). Conversely, mobility at homes has had the opposite behavior.

Then, the sanitary crisis has disrupted essential business conditions because of both mobility restrictions- from the countries' interior and exterior —and the

GRAPH 1. VARIATION (%) IN THE MOBILITY IN DEPARTMENT STORES AND RECREATIONAL CENTERS, PARKS AND RESIDENTIAL



Note: The daily variations are compared against the baseline (median) from January 3rd, 2020, to February 6th, 2020. Department stores and recreational centers include restaurants, coffee shops, malls, theme parks, museums, libraries, and movie theatres, while parks include local parks, national parks, beaches, squares, and public gardens.

Source: In-house elaboration with data from Google's Local Mobility Reports about COVID-19 (2021)



Image: "Mexico City's government ordered malls to close because of the pandemic of COVID-19" at el comunista.net en https://tinyurl.com/h8rxua8

social distancing conditions that limit the demand and induce a strong supply shrinking.

By segmenting tourism activities in services and commerce, the different impacts the sanitary crisis has had on the companies' incomes and the employment level can be observed.

IMPACT ON SERVICES INCOME¹

The income's behavior for the totality of the services is distinguished by precipitous falls, (negative) marks without precedent and different recovery trajectories. The companies' income decrease to annual rate registered considerable losses since March 2020; this means the sanitary crisis had recently started. The companies' income reported a shrinking similarly to the 2009 financial crisis.

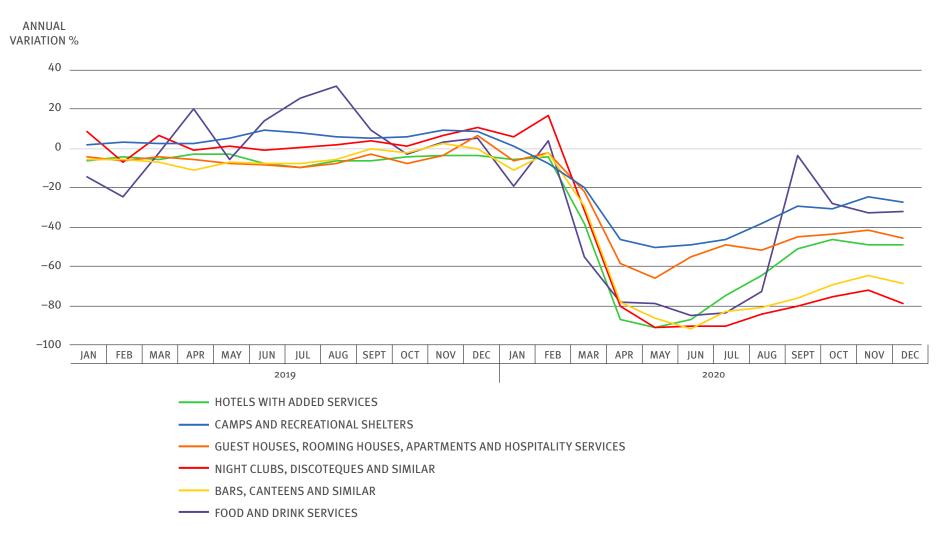
To quote just one example, the loss of -37.9% income during March in hotels is comparable with the May 2009 shrinking (-36.8%), the height of the crisis. However, the annual downfall in hotels' income was -90.7% in May 2020.

However, within the various temporal accommodation services and food and beverages preparation services —where hotels, bars, and restaurants excel—bars and nightclubs have been the most affected. Bars had a -91.7% loss during June, and the nightclubs and discotheques -91.1% in May. The income recovery in both activities seems to be directly linked to the opening up of the economies. As of December 2020, they presented losses of -68.6% and -78.8%, respectively.

¹ For the type of activity analysis, the economic classification from INEGI has been used. Grouping the service's activities in four categories: Temporary accommodation services, food and beverages preparation, transportation, business support services and cultural and sport leisure services, and other leisure activities services. Together, these activities lump 90% of the tourist GDP of the country.

GRAPH 2. TEMPORAL ACCOMMODATION SERVICES, AND FOOD AND BEVERAGES

INCOME ANNUAL PERCENTAGE CHANGE, 2019-2020. 2013=100



Source: In-house elaboration with data from Monthly Services Survey (Encuesta Mensual de Servicios), (2019-2020).

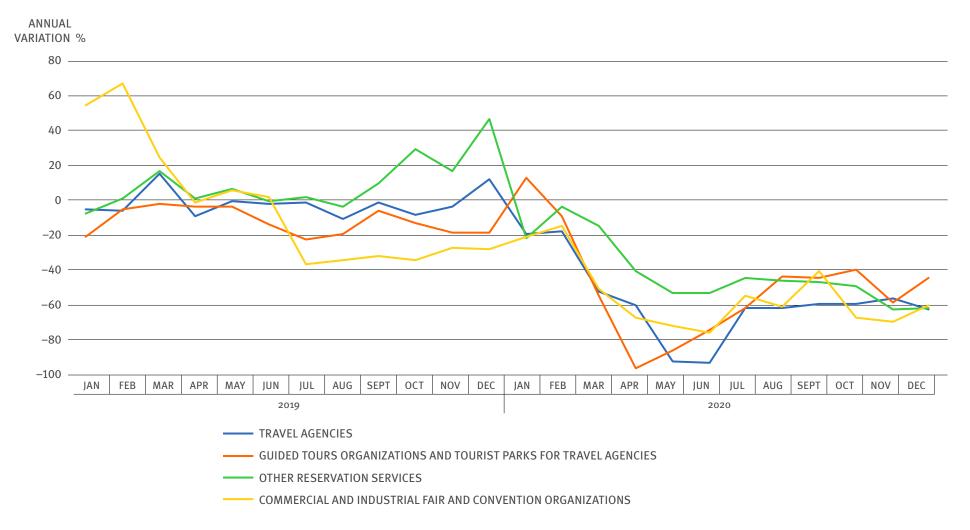
Similarly, travel agencies and excursions and tour packages had annual losses of -93.3% (June 2020) and -96.3% (April 2020), respectively. On the other hand, despite the organization of the conventions registers a lower downfall (-75.6% during June 2020), it does not show a solid recovery either since its growth had a maximum of -40.7%. However, it has tended to decline once again (-60.2% in December 2020). The same happens with other booking services during August (-61.6%).



Image: Photo: Getty Images. Establishments' sanitary protocols from bbc.com at https://tinyurl.com/38h7a95w

GRAPH 3. BUSINESS SUPPORT SERVICES

ANNUAL PERCENTAGE VARIATION, 2019-2020



Source: In-house elaboration with data from Monthly Services Survey, (2019–2020).





Leisure activity services also show a deep contraction due to the extended shut-down. Museums, botanic gardens, zoos, and private amusement parks have shown lower growth rates, –94% annually in April. Museums have kept a similar behavior (–92.2% in December 2020) for months. However, most of this category's activities have shown a lower loss in their incomes at the end of 2020, but it is essential to note that their behavior is still volatile.

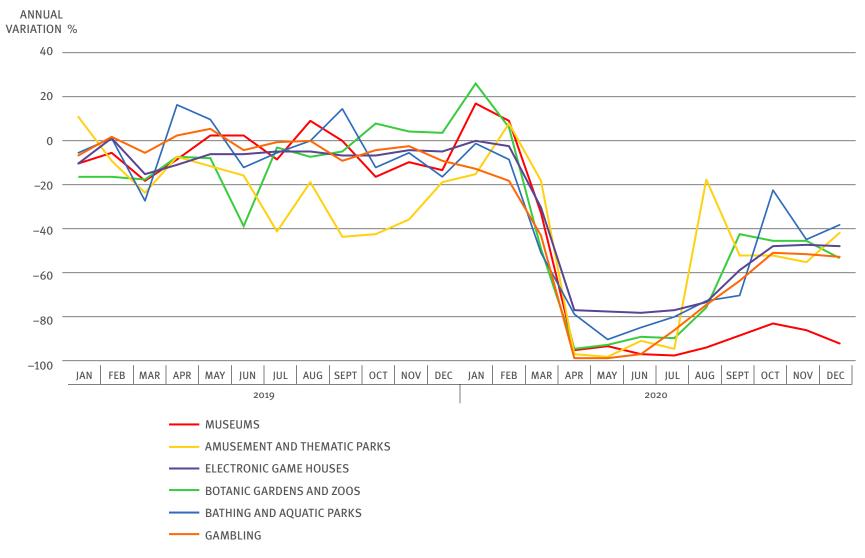
As of December 2020, private water parks and bathing establishments have a loss of –38.4%. In addition, casinos have reduced their income loss concerning 2019 (–48.2%) after the stagnation period between April and August 2020. Despite the decrease in losses, their income differences with respect to 2019 are still vast (between 38% and 53%).

Images: museums and entertainment.

El Papalote Museum closed. Photo: Reforma at https:// tinyurl.com/ys2s4fbb

Six flags opens on March 18th, 2021 from Forbes at https://tinyurl.com/4h2af7e8

GRAPH 4. PUBIC SECTOR CULTURAL AND SPORTS LEISURE SERVICES AND OTHER ENTERTAINMENT ACTIVITIES ANNUAL PERCENTAGE VARIATION, 2019–2020

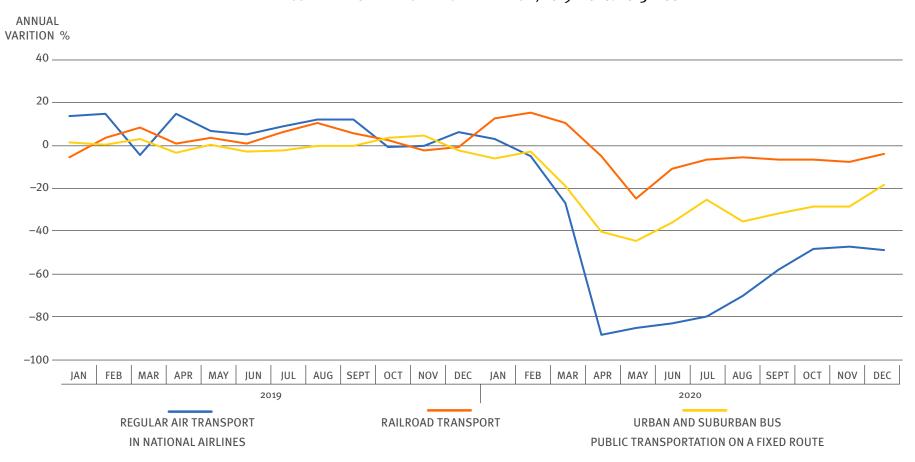


Source: In-house elaboration with data from Monthly Services Survey, (2019–2020).

ECONOMIC IMPACT IN THE TOURISM SECTOR :: 10

Regarding transportation, the national airlines' income grew -88.7% at an annual rate during April, 2020. It has been the most affected activity withing tourism transport, and in August this year, the annual variation is still -70%. By contrast, railway transportation has shown a rapid recovery (annual variation of -3.8% in December 2020). However, it just contributes 0.13% of the economic activities related to tourism services and 0.11% of the tourism GDP.

GRAPH 5. TRANSPORT
INCOME ANNUAL PERCENTAGE VARIATION, 2019–2020. 2013=100



Source: In-house elaboration with data from Monthly Services Survey, (2019–2020).

The airlines' condition has complicated the business environment internationally since the travelers' flow decreased by air route because traveling restrictions have dropped their incomes. This situation weakened the companies finances. Therefore, the bankruptcy risk (measure by the Altman Z-Score method²) for various airlines worldwide has increased. However, it should be mentioned that the breakdown risk has moved from European and Asian towards American and African as the COVID-19 dispersion has been moving forward.

TABLE 1. FINANCIAL MELTDOWN BY AIRLINE AND COUNTRY

AIRLINE	COUNTRY	ALTMAN Z-SCORE METHOD
Pakistan International	Pakistan	-6.83
Precision Air	Tanzania	-4.22
Azul	Brazil	-2.04
Medview Airlines	Nigeria	-1.73
AirAsia Indonesia	Indonesia	-1.41
Thai Airways	Thailand	-1.08
Gol Linhas	Brazil	-1.06
Aeromexico Group	Mexico	-1.03

Source: Bloomberg. *Note*: The highlighted airlines indicate new entries since March 2020. Minor punctuation to 1.8 shows bankrupcty risk within the next two years.

² According to Altman, the model has a precisión rate between 80 and 90 percent the previous year to bankruptcy. The Z-Score method uses five variables measuring liquidity, solvency, profitability, leverage, and recent financial performance.

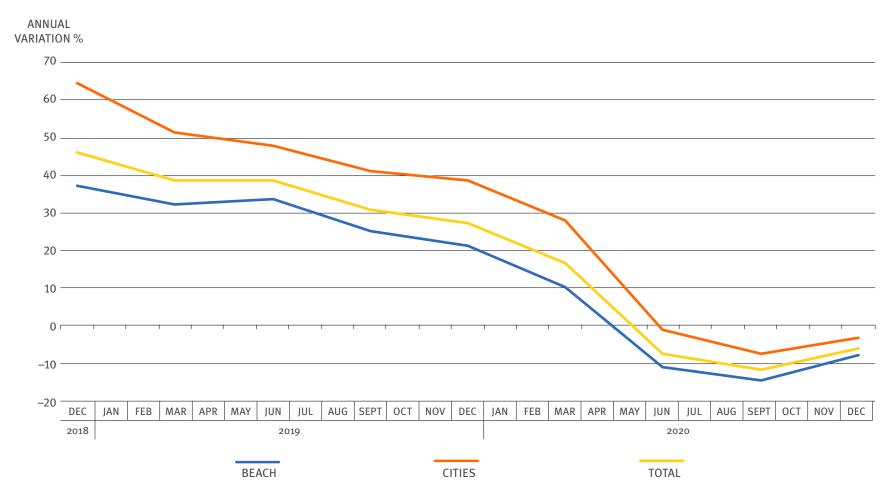
Unlike this type of transportation, the passenger transportation by bus³ had its most significant income reduction during May (-44.4%), and it has shown considerable reductions in losses during the summer and winter concerning 2019 (-18-4% in December 2020); however, the mentioned improvement seems to be due to a seasonal phenomenal for the relaxation of the lockdown measures since summer 2020.

From the evidence, three types of behavior are highlighted:

- THE MOST RESILIENT ECONOMIC ACTIVITIES such as pensions, guesthouses, apartments, and furnished houses (income contraction –64.6% in May and December are close to 55.5% of the 2019 income). Food and beverages preparation services and alcoholic and non-alcoholic beverages (a drop of –50.3% at an annual rate during May and with a slow upturn of –27.5% up to August).
 - 1. The first activities become essential when the consumers' behavior suffers possible changes -in the wake of the crisis-, where they prefer relatives or friend's accommodation and hosting platforms instead of using hotels. This situation propels the rent recovery in platforms such as Airbnb. The rent offer is just 6.1% under December 2019, while the establishments closing in the economy can get to 25%.
 - 2.In the second case, the food demand in fast food restaurants recovery excels (annual variation of -4.7% in February 2021) with respect to last year's similar behavior, while implementing different measures such as home delivery services to avoid the permanent closing of their companies.

³ Most contributing activity withing the tourism transportation services (14.7% of GDP and 16.3% of the services)

GRAPH 6. ACTIVE PROPERTIES IN AIRBNB AND VRBO ANNUAL VARIATION (%)



Source: In-house elaboration with data from AirDNA (2019-2020). Note: For comparison effects with official statistics, the beach and cities sample is the same The Tourism Secretariat elaborates (SECTUR for its acronym in Spanish).

ACTIVITIES WITH DEEP CRISIS AND WITHOUT IMPROVEMENT SIGNALS, such as private museums, whose income is equal to 6.2% of that obtained in 2019, and movie theatres which show income losses of 82.7% in December 2020 after coming from the most significant drop among the sector activities (-99.1% in April 2020). According to the National Chamber of Cinematography (CANACINE for its acronym in Spanish), during 2020, ticket sales decreased by 285.5 million (81% concerning 2019), which represented a loss in the box office of 15, 358 million pesos concerning 2019 (80.6% reduction).

RISK FACTORS THAT THREATEN THE BUSINESS STABILITY, such as the airlines' complex financial situation and the stagnation of the business support services.

The probable Interjet and Aeromexico bankruptcies can bring severe midterm repercussions as the quality services reduction, significant market concentration, and price increments due to less competition and seats' escalating price. In short, the contraction in the air route transportation supply will affect consumers and tourism destinations. For the moment, Interjet's market share in passenger transportation (19.7% up to January 2020) has been distributed to three main actors: Aeromexico (7.9%), Vivaaerobus (5.2%), and Volaris (8%)⁴.

While contributing beyond 1% of sector GDP, the support services as travel agencies are also of great importance because of their shaping role in the market, so that eventual bankruptcies can limit the sector recovery capacity in the short term. However, this situation can exacerbate the exhausted use of technology with its implications on the labor market (job displacement).

⁴ Aeromar decreased its participation by 0.6%, and Magnicharters and TAR had decreased 0.4% each.

TOURISM SERVICES EMPLOYMENT

The level of unemployment up to December 2020 is alarming, and this tendency continues in certain activities. Five cases highlight: convention organizers and commercial and industrial fairs (-46.6%), films and audio-visual materials exhibition (-37.9%), private sector museums (-30.2%), botanic gardens and privates zoos (-26.6%), bars, taverns, and similars (-34.1%), and nightclubs, discotheques, and similars (-41%).

Hotels, on their part, maintain steady unemployment rates since September (between 27.3% and 28.4%), which implies that three of every ten employments from last year have been lost. At least since 2019, that activity already showed negative growth rates (-1%).

Similarly, other activities present very high unemployment rates, such as private amusement and theme parks (-30.6% at an annual rate) and the cultural, artistic, sports, and similar promoters of the private sector (-23.6% annual rate).

Thus, it should be clear that the subnational economy's partial reopening in the Mexican sanitary regulation framework is not assuring the employment's generalized recovery in diverse activities. Because since summer 2020, it has not been possible to reestablish the previous sanitary crisis outbreak employment level.

TABLE 2. EMPLOYMENT BEHAVIORAL MAP IN SERVICES BY ACTIVITY TYPE. ANNUAL VARIATION (%)

EMPLOYMENT		UNEMPLOYMENT											
	2019	2020											
ECONOMIC ACTIVITY	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Regular air transport in national airlines													
Railway transport													
Suburban and urban passenger fixed-route bus public transport													
Display of movies and other audio-visual media													
Car rental without chauffeur													
Travel agencies													
Guided tours and tour packages for travel agencies organization													
Other reservation services													
Commercial and Industrial fair and convention organizers													
Private Sector terminal technical education schools													
Private sector higher technical education schools													
Private sector show promoters*													
Private sector museum													
Private sector zoo's and botanic gardens													
Private sector amusement parks and theme parks													
Private sector bathing establishments and aquatic parks													
Electronic game houses													
Other gambling													
Hotels with added services													
Camps and recreational shelters													
Guesthouses, rooming houses, apartments, furniture houses with hospitality services													
Nightclubs, discotheques, and similar													
Bars, canteens, and similar													
Food and alcoholic and non-alcoholic beverages preparations services											·		

^{*} Artistic, cultural, sports, and similar private promoters that count with venues to do the shows.

Source: In-house elaboration with data from Monthly Services Survey, (2019-2020).

On its part, the low unemployment rate that air route transportation shows (-10.8%) concerning the activities related to the services is significantly explained because of the labor market's inflexibility due to current legislation. However, it is expected that the Airlines' capital restructures in Mexico lead to increased unemployment in further months.



Image: "Aeromexico asks for a financial restructuring; the unions support it" at urbeconómica en https://tinyurl.com/9xt35anx

COMMERCE

AND ITS RELATION WITH THE TOURIST SECTOR

In contrast to services, commerce are mainly related activities. The participation of commerce in tourism is smaller than services, since the produced good's value concerning the total tourism GDP is 9.95%.

Moreover, as the sanitary crisis began, towards May 2020, the retail trade of clothing, custom jewelry, clothing accessories, and retail footwear trade had similar losses –78% and –79.9%, respectively. Up to December 2020, the annual income growth of both activities points to the decrease of losses overall in everything related to footwear (–20% at an annual rate).

The activities related to handicraft commerce are of significant interest due to their importance regarding the entire tourism sector 5, and because of their substantial number and their business establishments dependency. It should be highlighted that since November 2019, this caption was already growing at negative annual rates, just like stationery items, books, magazines, and papers.

The income decrease has run down for all the economic activities, mainly for jewelry, perfumery, stationery, books, magazines, and newspapers. However the growth pace, it is insufficient to recover the generated losses since the sanitary contingency started.

⁵ Crafts represent 3.74% of the total tourism production and 37.6% of the produced tourism goods. According to INEGI figures (2020), the tourism purpose crafts production value is 57, 703.47 million pesos, 53.9% greater than the income produced by air passenger transportation.

EMPLOYMENT IN COMMERCE RELATED TO TOURISM SECTOR

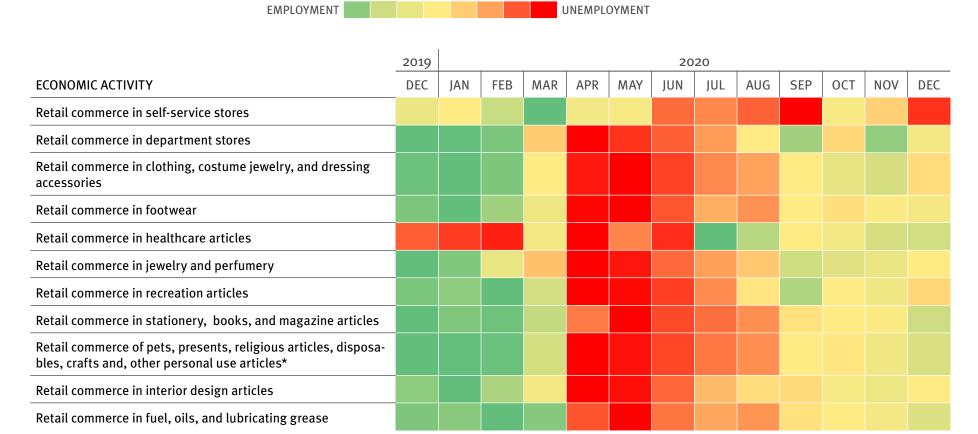
The employment setting for commercial activities that form the tourism sector pretends to be less drastic than for services. There are activities with severe employment collapses if you compare them to the previous lockdown levels. Nevertheless, generally, the labor market has kept a recovery tendency of the employment rate; the most evident examples are the retail fuel trade and healthcare commodities.

Nonetheless, despite the loss is more moderate than in tourism services, non of the economic activities related to the commerce recovers the growth rate observed at the end of 2019. Ten of eleven activities analyzed here show a negative growth annual rate. The exception is the retail health care products trade.

There are activities with severe employment collapses if you compare them to the previous lockdown levels.

The labor market has kept a recovery tendency of the employment rate; the most evident examples are the retail fuel trade and healthcare commodities.

TABLE 3. EMPLOYMENT IN COMMERCE BEHAVIORAL MAP BY ECONOMIC ACTIVITY TYPE. ANNUAL VARIATION (%)



^{*}Pets, gifts, religious items, retail trade, disposables, crafts, and other personal grooming items retail trade.

Source: In-house elaboration with data from Monthly Survey on Commercial Companies (2019–2020).

The damage caused to the economy has been far more significant for services than for commerce companies' income and employment. The sanitary crisis effect will have over the sector's composition will excel the weight of commerce and the tourism goods in the total of tourism in Mexico in the short term due to a minor contraction. In particular, the labor market for commercial activities shows a better performance than the case of tourism services.

Nevertheless, a not too encouraging and alarming fact is the underemployment increase, known as undercover unemployees. This phenomenon is a characteristic of this crisis (production factors' subutilization), and generally (all economy sectors), underemployment has increased by 89.3% between January 2020 and January 2021 (3.66 million people). Nevertheless, in accommodation and restaurant services, the underemployment level has increased by 111.1% (416,040 underemployed people more than last year).



Image: "Almost 100.000 people lost their job in Cancun. Some kept their jobs in spite of lack of tourists.." AFP from bbc at: https://tinyurl.com/35ekabtw

In addition, the total of Mexican economy services' compensations is 7.3% below the same month last year, while hotels are 21.1% below December 2019's figure. That is to say, even within the non-financial services, tourism-related services show a more significant decrease in employees' compensations (almost three times bigger) and are only surpassed by culture-related services, a sector that also shares activities with tourism.

Finally, as of January 2021, 761.2 thousand employments in restaurants and accommodation services have been lost, of which 349.6 thousand were men's job positions and 411.6 thousand were women's job positions, according to the National Occupancy and Employment Survey New Edition (ENOE for its acronym in Spanish). The crisis in labor occupation in this economic sector is also accentuated over women.

An alarming data is the underemployment increase, known as undercover unemployees. Underemployment has increased by 89.3% between January 2020 and January 2021 which means 3.66 million people.

In accommodation and restaurant services, the underemployment has increased by 111.1% that implies 416,040 underemployed people more than last year.

CONCLUSIONS

Tourism is probably the economic sector that suffers the ravages of the sanitary crisis the most, due to the fact that 90% of economic activity is produced through services where the most significant part of the sector's actives are focused. In addition, the big shutdown has been characterized by underemployment and underuse of production factors.

The companies linked to tourism income drop went from being a transitional fact for a permanent crisis. Certain seasonal elements in the consumption seem to give hope to the sector companies. However, inside the recovery slumber, diverse companies seem to be taking advantage of the juncture.

The blow to the economy was given, but now it moves forward through the air and threatens to unstabilize the whole market. It can end up being a species of business survival and economic cannibalism. There will be no option in the middle of the economic and social mess but reassign, recreate in the short term for a market in constant contraction. Those are the conditions the business in the sector will face, at least during 2021.

Underemployment has been the only tourism economy damper in the labor market. Similarly, the evidence points out that the employees' income drop (compensations) is significantly explained by the reduced working hours (underemployment). Nevertheless, the compensations drop will have crushing effects on labor poverty, mainly in the federative entities with greater disposition for tourism services.



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JULY 2021

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