



# The Dynamic Nature of Employment and Income in the Legal Amazon: Services

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This is the third in a series of four notes that report the results of the study The Dynamic Nature of Employment and Income in the Legal Amazon carried out under the Amazon 2030 project (AMZ 2030). The study includes a detailed discussion of the economic vitality of the Legal Amazon based on the identification of occupations and sectors that have recently (2012-2019) contributed most to employment and income generation in the region. The work uses data from the Continuous National Household Sample Survey (*Pesquisa Nacional por Amostra de Domicílios Contínua* – PNAD-Contínua) conducted by the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística* – IBGE) and expands on the research on the dynamics of the Labor Market in the Legal Amazon, which began the series of AMZ 2030 publications. In this note, we present the results of the study as they pertain to the service sector in the Amazon region.

An in-depth analysis of the evolution of the service sector shows that: (i) in contrast to the low growth trajectory of total employment in the region, the service sector experienced a significant rise – in fact, the absolute variation of employment in the service sector was higher than the variation for the entire Legal Amazon between 2012 and 2019; (ii) in the "services" occupations, the "salespeople" category stood out the most, showing exceptional growth rates; (iii) the highest level of dynamism in the service sector was concentrated in people who have completed at least upper secondary education, at the expense of a retraction in the employment of people with lower educational attainment, thus reinforcing income inequality in the region. This situation shows that the region's economic dynamism occurs mainly in urban activities, which are not related to the forest.

Table 1 illustrates the growth in employment for the occupations in the service sector. The occupations in the sector that generated the most jobs in the Legal Amazon in the period from 2012 to 2019 were selected for the analysis. The table also shows information disaggregated by topics such as income, number of employed individuals, and share of formal employment, among others.

The selected occupations in the service sector grew – in relative and absolute terms – much more than the total employment in the region for the period from 2012 to 2019. Relative employment in the service sector grew 28.3% in the Legal Amazon, about six times the total employment growth in the region for the same period (5.3%). This means that a large portion of the economic dynamism in the Amazon region was attributed to the expansion of this sector and, particularly, to the growth in the number of people working as salespeople, a category that alone saw a 62.7% increase in job generation. The occupations selected in the service sector are also among those that employ the most people in the Legal Amazon: approximately 3.5 million individuals (33% of the total 10.6 million workers employed in the region in 2019).

The table also reveals the precariousness to which workers in the service sector are exposed in the region. The average income for these workers fell 0.5% from 2012 to 2019, with average earnings of R\$ 1,426 in the last year of that period, lower than the average income in the Amazon region (R\$ 1,692). The rate of formal employment in the sector was also very low, with 63.4% of workers working with no formal contract, a number 4 percentage points higher than the already high rate of informality for the region as a whole (59.4%).

Table 1. Breakdown of employment in selected occupations in the service sector, Legal Amazon, 2012-2019

	2012-2019 variation			2019			
	Total Emp.	Emp. (%)	Income (%)	Total Emp.	Income (R\$)	Formal (%)	Private (%)
Total	537,822	5.3	3.4	10,632,195	1,692	40.6	84.2
Total selected occupations from the service sector <sup>1</sup>	776,915	28.3	-0.5	3,519,151	1,426	36.6	90.1
<b>Selected occupations from the service sector</b>							
Salespeople	606,932	62.7	-5.7	1,574,725	1,378	35.7	99.9
Personal services and care	143,490	23.5	-6.3	754,816	1,056	32.4	82.6
Domestic services	27,850	3.4	9.3	852,797	878	35.3	87.3
Social and cultural services	12,951	12.0	0.1	120,530	2,678	34.4	78.4
IT and communication services	2,854	5.9	3.6	51,622	2,712	71.3	85.6
Financial and administrative services	-17,161	-9.4	17.8	164,663	3,659	59.7	71.9

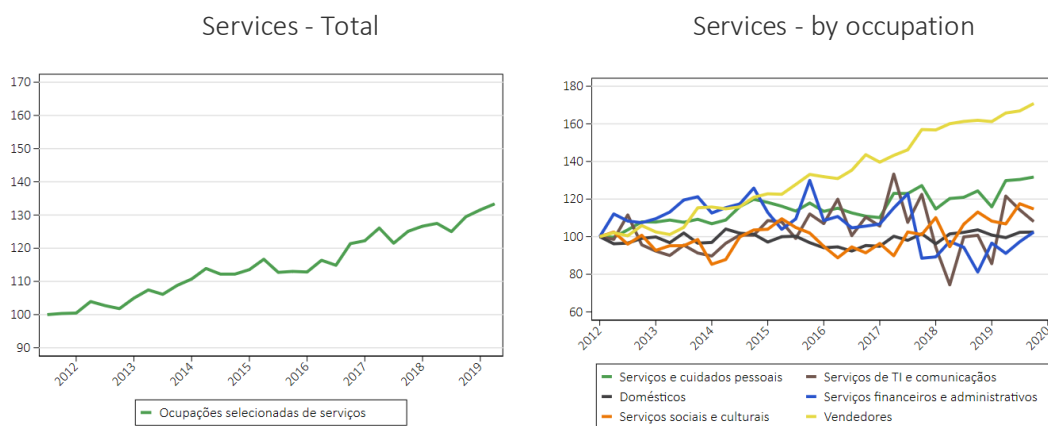
Source: Amazon 2030 based on data from IBGE's Quarterly PNAD-Contínua

Table 1 also shows that, although the service sector was the one that grew the most in the Legal Amazon between 2012 and 2019, such growth was quite heterogeneous. On the one hand, the occupation with the highest growth rate in employment was "salespeople", with a 62.7% increase. The income of these professionals, however, fell by about 6% in the same period. Salespeople were the occupation with the largest contingent of workers in 2019 – about 1.6 million people. The income of this group, however, was among the lowest of the selected occupations (R\$ 1,378), above the average earnings of domestic workers (R\$ 878) and the income of personal services and care providers (R\$ 1,056). On the other hand, the highest paid occupations in the service sector in 2019 (social and cultural services, financial and administrative services, and IT and communication services) accounted for only 9% of the total 3.6 million people employed in the sector. Despite showing the highest average income among the categories and the highest relative growth in income between 2012 and 2019, the financial and administrative services category was also the one that eliminated the most jobs: 9.4%.

<sup>1</sup> It should be noted that in Table 1 the total number of occupations in the service sector corresponds to the total number of selected occupations in the sector. This means that there are other occupations in the service sector that were not considered in this analysis. As previously mentioned, the occupations selected in the service sector were those that generated the most jobs in the Legal Amazon, as well as those that eliminated the most jobs in the period from 2012 to 2019, such as financial and administrative services.

Employment growth in the service sector was positive during the period under review. This growth, however, differed for each occupation – as shown in Figure 1. The analysis shows a positive evolution for every occupation in the selected categories over the period, with the exception of financial and administrative services. The growth in the number of people working as salespeople was the most pronounced vis-à-vis the other occupations. Services and personal care comes in second, followed by social and cultural services. Domestic services and IT and communications services showed positive growth over the period, albeit more modest.

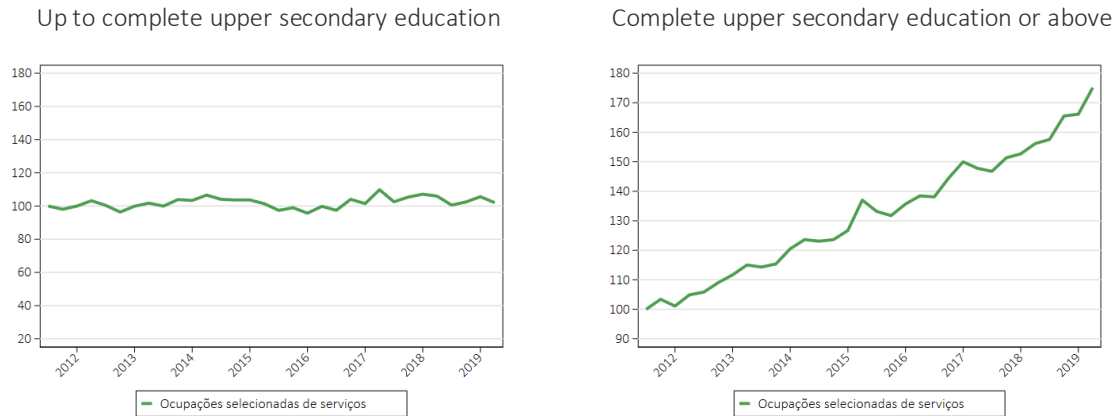
Figure 1. Evolution of employment in the service sector, total and by selected occupations, Legal Amazon, 2012-2019



Source: Amazon 2030, based on data from IBGE's Quarterly PNAD-Contínua

Though the service sector accounts for a significant part of the employment growth seen in the Amazon region, such growth has not benefited the less educated population. Figure 2 shows the evolution of employment in the service sector for the population with up to upper secondary education and for the population with at least upper secondary education (i.e., upper secondary or above). The figure shows that the economic dynamism of the services sector in the Legal Amazon occurs among the population with the highest educational attainment (who have finished upper secondary education or above), while there was almost no growth in the number of people employed in the sector for the less educated segment of the population.

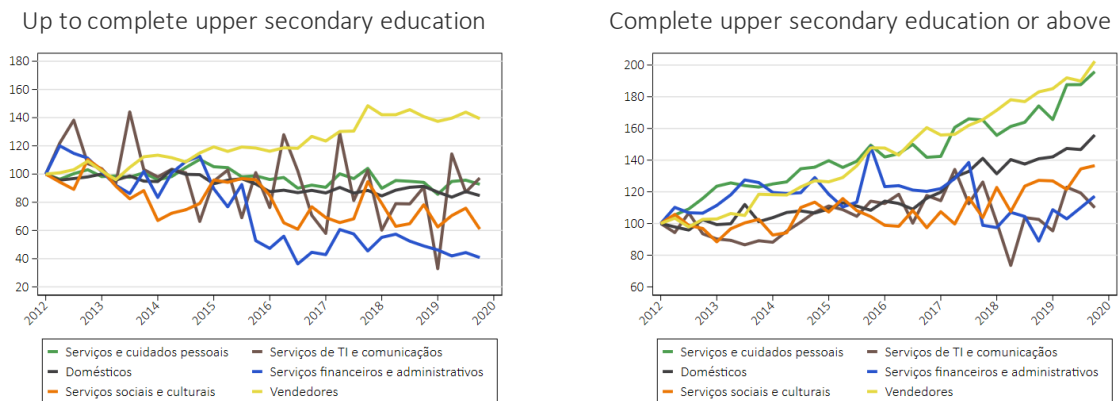
Figure 2. Evolution of employment in the service sector, by population with educational attainment up to upper secondary education and the population with complete upper secondary education or above, Legal Amazon, 2012-2019



Source: Amazon 2030, based on data from IBGE's Quarterly PNAD-Contínua

An analysis of the evolution of employment in the service sector by occupation for the less educated population (up to complete upper secondary education) and the more educated population (complete upper secondary education or above) shows that, in both cases, the "salespeople" occupation stands out from the others (see Figure 3). However, for the population with educational attainment up to complete upper secondary education, this was the only occupation to show employment growth between 2012 and 2019. In the case of the population with complete upper secondary education or above, other occupations also contributed to the dynamism of the service sector in the same period.

Figure 3. Evolution of employment in the service sector, by selected occupation for the population with educational attainment up to complete upper secondary education and the population with complete upper secondary education or above, Legal Amazon, 2012-2019



Source: Amazon 2030, based on data from IBGE's Quarterly PNAD-Contínua

Table 2 presents a more detailed characterization of employment growth in selected occupations in the service sector, with the same breakdown by educational attainment. The information in the table corroborates the notion that the dynamism of the service sector in the Legal Amazon occurred among the more educated population. It should be noted, however, that this greater vitality occurred precisely among the less qualified occupations, which, consequently, pay lower salaries. Such is the case of salespeople, an employment category that grew 90.5% between 2012 and 2019 among the population group with higher educational attainment. The remuneration of this group, however, is higher only than those of personal services and care providers and domestic employees. In turn, financial and administrative service professionals, who were the best-paid category in 2019 (BRL 3,986 among the more educated and BRL 2,425 among the less educated), saw the lowest employment growth rate between 2012 and 2019: a 3.6% increase for people with complete upper secondary education or above, and a 61.2% decrease for the group with up to complete upper secondary education.

As the table shows, in a scenario of economic stagnation and low employment growth (only 537 thousand jobs had been created in the region as a whole at the end of a 7-year period), the increased dynamism in the service sector among the more educated people came at the expense of a retraction in employment in the sector for the less educated segment of the population. As such, the jobs available in service sector occupations that require less qualification (salespeople, personal services and care providers and domestic workers) were filled by more educated people, because employment growth among the occupations that require more qualification (particularly IT and communication services and financial and administrative services) saw very modest percentages when compared to other occupations. Let us take salespeople as an example to illustrate this point. In 2012, this category employed 490 thousand people in the less educated range and 477,000 people in the more educated segment. In 2019, this same category employed 664,000 people in the less educated range and 910,000 people in the more educated segment. A similar movement can be seen for the other occupations in the service sector considered in this analysis.

As early as 2012, there were fewer people with up to complete upper secondary education working in occupations that require more qualification. Between 2012 and 2019, these occupations underwent the greatest retraction among the less educated population. Employment in financial and administrative services dropped 61.2%; the number of jobs in social and cultural services dropped 31.5% and in IT and communication services, 29.1%.

Table 2. Breakdown of employment for selected occupations in the service sector, by population with educational attainment up to complete upper secondary education and the population with complete upper secondary education or above, Legal Amazon, 2012-2019

	2012-2019 variation			2019			
	Total Emp.	Emp. (%)	Income (%)	Total Emp.	Income (R\$)	Formal (%)	Private (%)
<b>Population with upper secondary education or above</b>							
Total selected occupations from the service sector	740,462	62.3	-9.2	1,929,526	1,769	48,8	86,3
Salespeople	432,524	90,5	-6,1	910,284	1,688	49,9	99,9
Personal services and care	171,975	71.2	-13.0	413,576	1,263	40.7	77.1
Domestic services	102,682	49,5	2.4	310,297	1,057	46.6	77.8
Social and cultural services	22,602	29.4	-6.2	99,532	2,913	40.4	72.9
IT and communication services	5,392	13.5	-1.7	45,430	2,995	74.5	84.1
Financial and administrative services	5,287	3.6	9.2	150,408	3,986	64.0	68.9
<b>Educational attainment up to upper secondary education</b>							
Total selected occupations from the service sector	36,452	2.3	-2.8	1,589,626	1,009	25.3	93.6
Salespeople	174,407	35.6	-12.3	664,441	1,127	19.8	100.0
Personal services and care	-28,486	-7.7	-8.3	341,241	929	25.4	87.1
Domestic services	-74,832	-12.1	8.5	542,500	849	30.4	91.5
Social and cultural services	-9,652	-31.5	-3.6	20,998	1,531	14.1	95.8
IT and communication services	-2,539	-29.1	28.1	6,192	1,814	54.3	93.5
Financial and administrative services	-22,448	-61.2	37.2	14,255	2,425	33.4	89.6

Source: Amazon 2030, based on data from IBGE's Quarterly PNAD-Contínua

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### About Amazon 2030

The **Amazon 2030** project is an initiative by Brazilian researchers to design a sustainable development plan for the Brazilian Amazon. Our goal is for the region to reach a higher level of economic and human development and achieve sustainability in the use of natural resources by 2030.

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