

# The Class Biases of Economic Sanctions in Iran

Labour Market Position and Household Welfare

---

Zep Kalb



## Table of contents

Introduction .....	2
Methodology .....	4
Sanctions severely reduced household budgets .....	8
Agricultural classes and the public sector were the primary victims of sanctions .....	10
Political class coalitions mediated the effect of sanctions .....	15
Despite sanctions, policymakers extended social protection .....	19
Conclusion .....	23

## Executive summary

This report evaluates the effect of economic sanctions on household welfare in Iran between 2010-20, using data from the annual Household Expenditure and Income Survey (HEIS) published by the Statistical Center of Iran. The report takes an occupational class approach to understand how the impact of sanctions was mediated by households' position in the labor market. Key findings include:

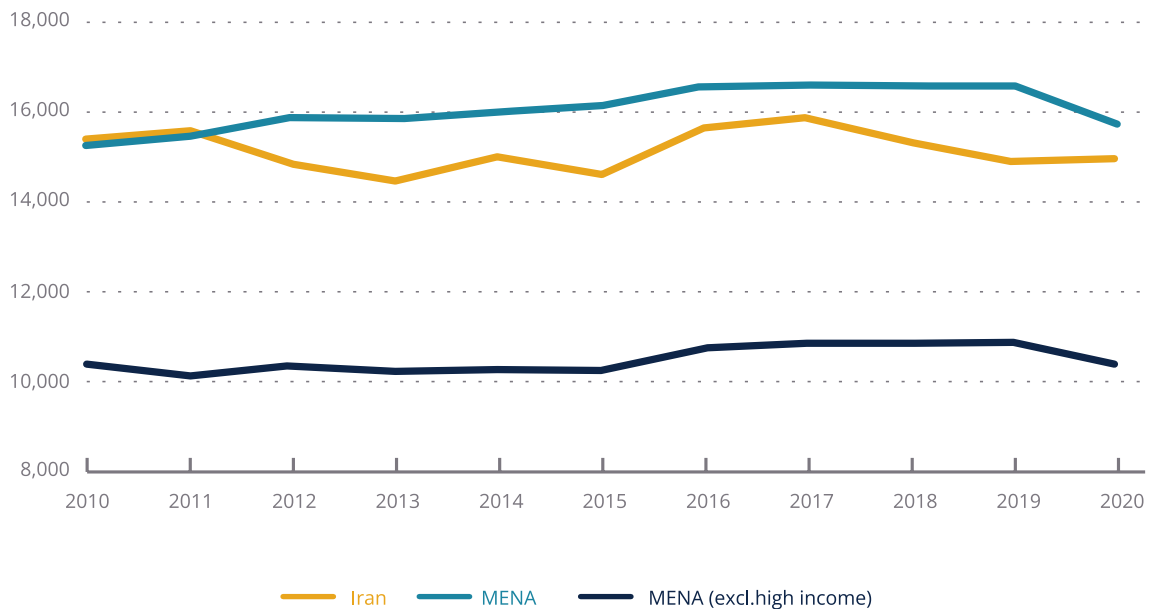
- Household consumption and welfare were severely affected by the sanctions imposed on Iran since 2010. On average, households reduced their expenditures by a fifth between 2010 and 2020.
- Occupational class substantially mediated the impact of sanctions on household welfare. Social groups fared differently in the sanctions' period based on their position in the labor market. Agricultural workers and state employees were hit especially hard by sanctions.
- Government policymaking exhibits class and group biases. However, political elites generally failed to protect their constituents from the adverse impact of sanctions.
- Sanctions relief in 2016-2017 was associated with a rise in household welfare across Iran's occupational classes.
- The class biases of sanctions effects reveal gender, ethnic, and regional intersections that shed light on recent protest movements led by women and minorities in Iran.



# Introduction

The 2010s were a lost decade for most economies in the Middle East and North Africa. Countries across the region ended the decade with per capita income levels that were barely higher and, in many cases, significantly lower. Lower commodity prices, domestic upheavals, military conflicts and the COVID-19 pandemic depressed growth and investment. With international sanctions compounding these negative effects, the Iranian economy has fared particularly poorly. GDP per capita, as measured in constant international dollars, fell when sanctions were tightened in 2012–13 and 2018–19 and experienced a short reprieve when sanctions were partially lifted between 2015 and 2017 (Figure 1).

**Figure 1: GDP per capita.**  
Measured in constant 2017 international dollars



Source: World Bank

The impacts of sanctions on Iran's economy have been widely studied.<sup>1</sup> Sanctions contributed to a drop in oil exports, lower employment, currency devaluation and skyrocketing inflation.

1. Recent studies include: Ali Moghaddasi Kelishomi and Roberto Nisticò, "Employment Effects of Economic Sanctions in Iran," *World Development* 151 (March 1, 2022): 105760; Dario Laudati and M. Hashem Pesaran, "Identifying the Effects of Sanctions on the Iranian Economy Using Newspaper Coverage," SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, 2021), Orkideh Gharehgozli, "An Estimation of the Economic Cost of Recent Sanctions on Iran Using the Synthetic Control Method," *Economics Letters* 157 (August 1, 2017): 141–44, Firat Demir and Saleh S. Tabrizy, "Gendered Effects of Sanctions on Manufacturing Employment: Evidence from Iran," *Review of Development Economics* 26, no. 4 (2022): 2040–69.

But the discrete impacts of sanctions on ordinary families have gotten less attention.<sup>2</sup> In this report, I use data from the Household Expenditure and Income Survey (HEIS) to investigate the relationship between economic sanctions and household welfare. Whereas previous studies have mostly used an income approach, I use an occupational class approach to examine how the impacts of sanctions were mediated by each household's position in Iran's labour market.

An occupational class approach is insightful for several reasons. First, employment income constitutes the dominant source of household income in Iran, making the labour market a principal driver for shifts in household welfare. Second, Iran's labour markets are thoroughly segmented by gender, ethnicity, religion and urban-rural divides. Looking at occupational class provides a window to assess how sanctions differentially impacted women, minorities and rural communities. Third, there is significant sectoral variation in sanction effects.<sup>3</sup> Focusing on occupational class rather than income alone captures some of this heterogeneity. Finally, government resources are distributed unevenly across social groups, reflecting the biases inherent in redistributive politics. Some social groups are more proximal to the state and might thus be able to lay more direct claims on its resources. By looking at occupational class, this report provides deeper insights into the social bases and group biases of policymaking in Iran under sanctions.

This report finds that household consumption and welfare were hit hard by the sanctions that have been imposed on Iran since 2010, with the average household reducing its expenditures by a fifth between 2010 and 2020. Moreover, this report shows that occupational class mediated the impacts of sanctions on household welfare. Notably, household reliance on farming, state employment, and urban manual labour were key factors determining outcomes in household spending and consumption. This report also finds that the effects of sanctions on healthcare and pension coverage are mixed rather than unequivocally negative, highlighting the robustness and persistence of certain welfare institutions in Iran.

---

2. Exceptions include: Djavad Salehi-Isfahani, "The Impact of Sanctions on Household Welfare and Employment in Iran," *Iran's Economy Under Sanctions* (SAIS, Johns Hopkins University, Washington, D.C., August 11, 2022), Morteza Ghomi, "Who Is Afraid of Sanctions? The Macroeconomic and Distributional Effects of the Sanctions against Iran," *Economics & Politics* 34, no. 3 (2022): 395–428.

3. Gabriel Felbermayr et al., "On the Heterogeneous Effects of Sanctions on Trade and Welfare: Evidence from the Sanctions on Iran and a New Database," *School of Economics Working Paper Series* (LeBow College of Business, Drexel University, May 16, 2020), [https://ideas.repec.org/p/ris/drxlwp/2020\\_004.html](https://ideas.repec.org/p/ris/drxlwp/2020_004.html).



# Methodology

The HEIS is one of the largest and oldest surveys conducted in Iran and contains the best available data on household employment and income. It is a nationally representative survey composed of urban and rural segments and is stratified at the provincial level. As such, it requires the use of probability weights to account for the unequal likelihood of selection into the sample. Households are distributed randomly and evenly throughout the year, meaning that one-twelfth of the sample is interviewed monthly. Gregorian notations for years are used in this report, but the actual survey period is left as in the HEIS, from March to March. For example, ‘the year 2010’ refers to the survey period between March 2010 and March 2011. Around 40,000 households participate in the survey each year. The combined dataset from 2010–20 contains a total of 439,434 households.

It is methodologically challenging to isolate the causal effects of an economic shock on a population. Other determinants and unobserved factors may act as confounders. To give one example, the Iranian government introduced a cash transfer scheme in 2011, around the same time that sanctions were first tightened, making it hard to evaluate exactly how sanctions alone impacted household welfare.<sup>4</sup> This report does not attempt to precisely identify the causal effect of sanctions. As a rougher approximation, I use year periods in which sanctions had a major and clear effect on the economy. The report uses both two- and one-year timeframes to assess this shock. I use the years 2013 and 2019 for the single-year shocks. There is a delay between the imposition of sanctions and changes in household spending, and these years most clearly capture the full negative ‘shock’ effect. As an additional sense check, I also employ two-year timeframes using the years 2012–13 and 2018–19.

This report uses an expenditure approach to obtain estimates of income trends. I follow the scholarly consensus by using household expenditures rather than incomes. A main issue with many household budget surveys, including the HEIS, is that participants tend to underreport their income.<sup>5</sup> I obtained expenditure estimates by aggregating over 1000 items across several survey components. In some cases, such as housing expenditures or investments, the period was one year. In most cases, the timeframe for reporting on these expenses was the previous month. For these, I obtained yearly estimates by calculating average monthly sums and multiplying by twelve.

The report primarily uses median spending estimates. Because income distributions are right-skewed, median estimates provide a better approximation of the ‘typical household’ than mean estimates. Moreover, for purposes of international comparability, I use constant

4. Djavad Salehi-Isfahani and Mohammad H. Mostafavi-Dehzoeei, “Cash Transfers and Labor Supply: Evidence from a Large-Scale Program in Iran,” *SSRN Scholarly Paper* (Rochester, NY: Social Science Research Network, December 30, 2016), <https://doi.org/10.2139/ssrn.2896702>.

5. Aziz Atamanov, et al., “Constructing Robust Poverty Trends in the Islamic Republic of Iran: 2008-14,” Policy Research Working Paper (World Bank Group, September 2016); Carlo Azzarri, et al., “Measure for Measure: Systematic Patterns of Deviation between Measures of Income and Consumption in Developing Countries - Evidence from a New Dataset” (Third Global Conference WYE City Group on Statistics on Rural Development and Agricultural Household Income, Washington, D.C.: Food and Agriculture Organization (FAO), 2010).

US dollars at purchasing power parity (PPP) in all subsequent analyses. PPP conversion data were obtained from the World Bank, rebased to the year 2020 and used to convert spending in local currency into constant, inflation-adjusted, international dollars.

I approach household expenditure data using an occupational class framework to explore whether or not sanctions have a class bias, meaning that their effects are felt more by some social groups than others. I use HEIS occupation-specific income data to assign households to social or occupational classes. Specifically, I define a household's occupational class by using the highest-earning job of the highest-earning household member. In the vast majority of cases, the highest-earning household member was also the household head, as defined by the survey. The highest earners were preferred over household heads to maximise the number of economically active households included in the sample. Respondents rarely reported multiple jobs, making the choice of class-defining occupation relatively straightforward.

*Table 1: Occupational class schema*

Occupational class	Explanation	Broadly corresponding social class
Public sector	All public sector workers, consisting mostly of civil servants and administrators, plus a small (<15%) segment of industrial workers	'Modern' middle class
PMC	The 'professional-managerial' class: professional, managerial, administrative, and non-manual routine workers in the private sector	
Small proprietors	Many self-employed workers; small proprietors with or without employees	Petty bourgeoisie or 'traditional' middle class
Non-farm workers	Skilled and unskilled manual workers employed in the non-agricultural sector	Working class
Farm workers	Skilled and unskilled manual workers employed in the agricultural sector	
Farmers	Independent farmers and farm employers	Peasantry

*Note: Households were assigned to an occupational class based on the highest-earning job of the highest-earning household member.*

Table 1 summarises the occupational classes used, their definitions and their broadly corresponding social classes. The occupational classes were constructed using four-digit International Standard Classification of Occupations (ISCO) codes associated with the highest-earning household member and the occupational status associated with their job. To create macro-level classes, I broadly followed existing sociological research on stratification

and social mobility in Iran and elsewhere.<sup>6</sup> The report uses a six-category schema to furnish analytical complexity and breadth while also maintaining sampling robustness and precision. In addition to the common distinctions between administrative and professional classes, small proprietors, farm, and non-farm working classes, and the peasantry, I separated out the public sector because it is directly reliant on state spending, making it a key target for government policymaking and austerity decisions.

Despite significant economic readjustments, Iran's occupational structure remained broadly stable over the course of the 2010s. Table 2 breaks down Iran's household-level occupational class structure. With its large class of non-agricultural manual workers and small proprietors, Iran's class structure is quite typical for a developing, middle-income country.<sup>7</sup> In large part because of arid conditions, Iran's peasantry is relatively small, comprising less than 15 percent of all employed households. Iran's public sector is also relatively small, comprising around 20 percent of all employed households in the sample.<sup>8</sup>

*Table 2: Estimates of Iran's occupational class structure, averaged over 2010–20*

Occupational class	% Total	% Employed	Total sampled households
Farm workers	3.5	4.7	23,218
Farmers	7.8	10.1	62,676
Professional-managerial class (PMC)	15.3	20.0	47,586
Public sector	11.0	14.2	41,686
Small proprietors	13.7	17.8	51,346
Non-agricultural workers	25.5	33.2	115,935
Unemployed or non-active	23.1		96,939
Unspecified	0.0	0.0	48
<b>Total</b>	<b>100</b>	<b>100</b>	<b>439,434</b>

Source: *Household Expenditure and Income Surveys*, Statistical Centre of Iran.

Note: Due to rounding total figures amount to less than 100 percent.

It should be noted here that the HEIS is not a labour force survey. The survey contains few questions on occupations and job characteristics, precluding a more in-depth discussion of whether jobs in Iran became more precarious. As a result, I mainly restrict myself to evaluating trends in informality and social security, which are calculated using questions on social insurance spending.

6. Robert Erikson and John H. Goldthorpe, *The Constant Flux: A Study of Class Mobility in Industrial Societies* (Clarendon Press, 1993); Farhad Nomani and Sohrab Behdad, *Class and Labor in Iran: Did the Revolution Matter?* (Syracuse, NY: Syracuse University Press, 2006).

7. Yunus Kaya, "Proletarianization with Polarization: Industrialization, Globalization, and Social Class in Turkey, 1980–2005," *Research in Social Stratification and Mobility* 26, no. 2 (June 1, 2008): 161–81, <https://doi.org/10.1016/j.rssm.2007.11.003>; Alejandro Portes and Kelly Hoffman, "Latin American Class Structures: Their Composition and Change during the Neoliberal Era," *Latin American Research Review* 38, no. 1 (2003): 41–82.

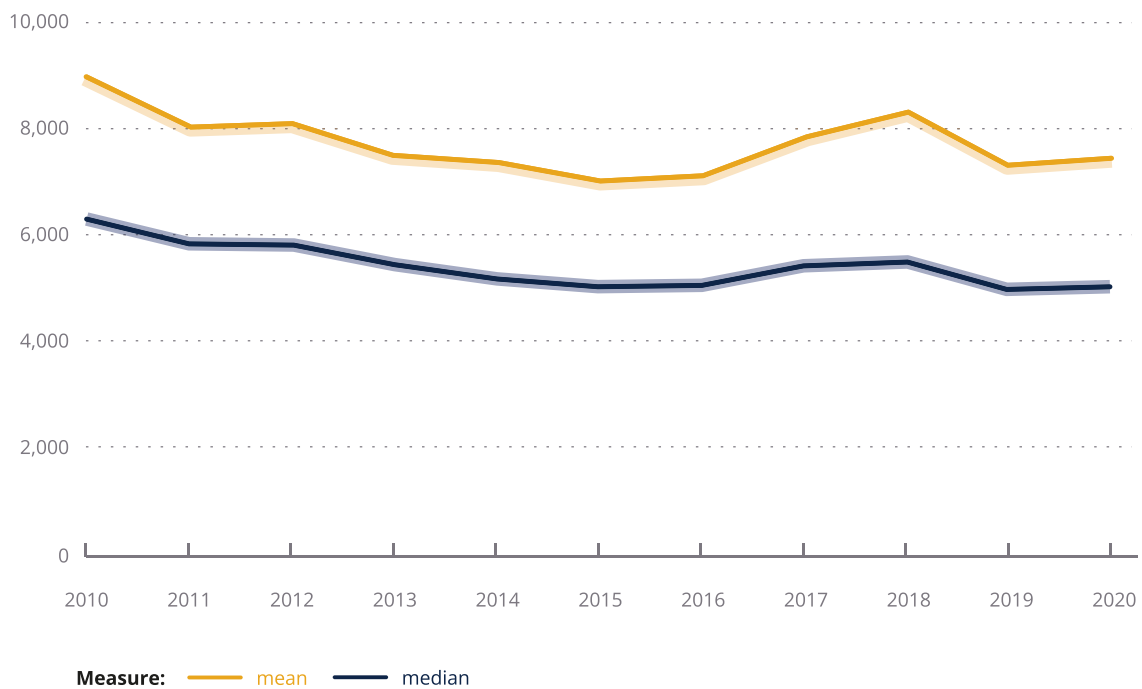
8. World Bank, "Public Employment and Governance in Middle East and North Africa" (Washington, D.C.: World Bank, May 2016), <https://openknowledge.worldbank.org/handle/10986/25181>.



# Sanctions severely reduced household budgets

This section reviews changes in household spending between 2010 and 2020, broadly assessing the impact of two rounds of sanctions and the period of sanctions relief. HEIS data indicates that the average household cut back its expenditure by about a fifth.<sup>9</sup> According to estimates from the HEIS, median and mean household spending per member fell by 20.9 and 17.8 percent respectively (Figure 2). In 2010, a typical Iranian household spent around \$6300 international dollars per capita, falling to below \$5000 by 2020. Household spending fell more than overall GDP, suggesting that companies, the rich, and the government were able to transfer the cost of economic adjustment onto ordinary consumers, including by reducing the salaries and incomes of workers.<sup>10</sup> It is likely that lower labour costs helped to contain unemployment over the course of the 2010s.<sup>11</sup>

*Figure 2: Annual household expenditure, 2010-20 per capita, using constant 2020 international \$*



Notes: Estimates include 95% confidence bands. To account for household size, all estimates are in per capita terms

9. A more in-depth analysis can be found in Salehi-Isfahani (n 1)

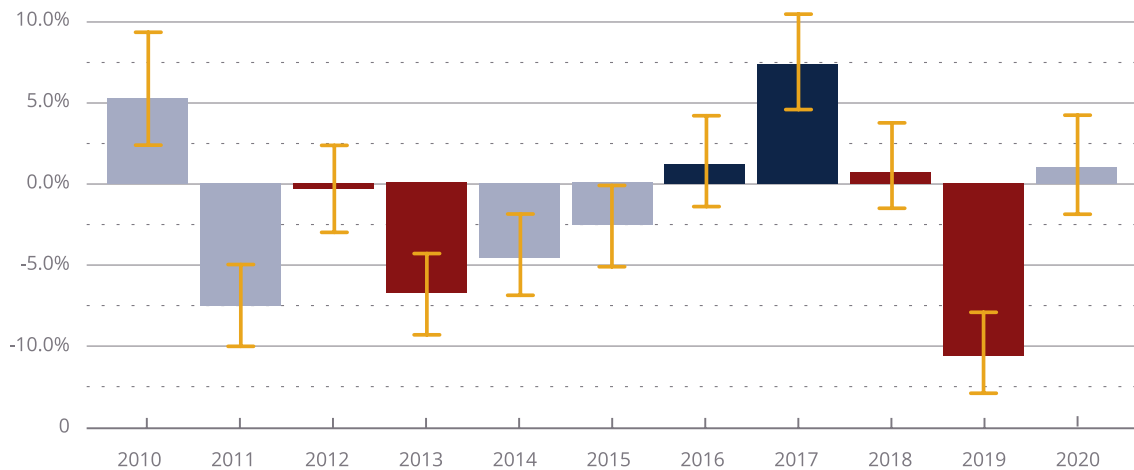
10. Gross domestic product (GDP) is calculated as the sum of money spent by individual consumers, businesses and the government.

11. According to International Labour Organization data, unemployment rates declined each time sanctions were tightened. See Salehi-Isfahani (n 9).



What was the impact of sanctions and sanctions relief on household welfare? Many countries in the Middle East and North Africa experienced stagnant or falling GDP growth, without experiencing the types of economic sanctions imposed on Iran. One way to assess the independent impact of sanctions is by looking at the precise years in which sanctions were imposed or partially lifted. Figure 3 plots changes in median household expenditure, dividing the 2010s up into several sub-periods. The figure, which includes 95 percent confidence intervals, highlights that household spending was already falling prior to the tightening of sanctions in 2012–13. In 2011, median household spending fell by an estimated 7.6 percent. In the sanctions ‘shock’ years of 2012–13, spending estimates fell by only 0.3 percent in 2012 and a more substantial 6.8 percent in 2013. The rising trend in 2011–12 has been attributed to the introduction of the cash transfer scheme in 2011.<sup>12</sup> While this cash transfer scheme initially boosted household incomes, its real value dwindled substantially in subsequent years.

*Figure 3: Change in annual median household expenditure per capita, using constant 2020 international \$*



*Notes: Years of intensified sanctions (2012–13; 2018–19) have red bars. Sanctions relief years (2016–17) are dark blue. All other years are pale blue.*

Declines in household spending continued in 2014–15, but at a slower pace, as the Iranian government continued negotiations over its nuclear programme and received interim sanctions relief. In January 2016, Iran benefited from broad sanctions relief as part of the Joint Comprehensive Plan of Action (JCPOA). Median household spending grew, at an estimated 1.3 percent in 2016 and 7.4 percent in 2017. But the fortunes of Iranian households would soon reverse again. The United States unilaterally withdrew from the JCPOA and reimposed sanctions in 2018. That year, growth in median household expenditures slowed by around 1 percent, before contracting 10.6 percent in 2019, wiping out any gains made during the relief period. In 2020, as Iran grappled with the COVID-19 pandemic, median household spending grew by 1.2 percent, although this estimate is not statistically significant at the 95 percent confidence level.

12. Atamanov, et al. (n 5)

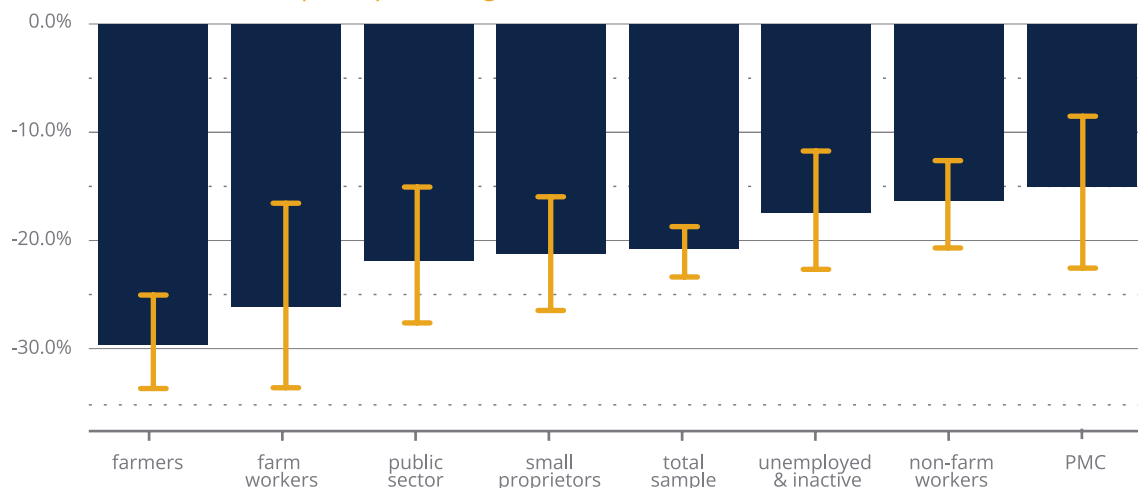


# Agricultural classes and the public sector were the primary victims of sanctions

Most Iranian households cut back on spending as incomes fell and the value of real wages declined over the course of the 2010s. However, some social groups fared worse than others depending on their positions in the labour market. In this section, I look in more depth at changes in household expenditures by occupational class. Occupational class status is defined using the job of the highest-earning household member.<sup>13</sup>

Findings from the HEIS show that agricultural classes and the public sector were the primary victims of sanctions. Sanctions lowered remuneration through state employment, agricultural work, and business ownership. By contrast, wage-earners working in urban areas, especially in the private sector, appear to have fared better. As described below, this finding has important implications for our understanding of how the economic impacts of sanctions vary not just by social class, but also by gender and ethnicity.

*Figure 4: Total change in median household spending (2010-20) per capita, using constant 2020 international \$*



*Notes: Occupational class is defined on the basis of the employment characteristics of the highest-earning household member.*

Figure 4 depicts the total change in median household spending by occupational class in Iran between 2010 and 2020, ranked in ascending order. The estimates include 95 percent confidence intervals.<sup>14</sup> In terms of overall performance in the decade, three broad social groups

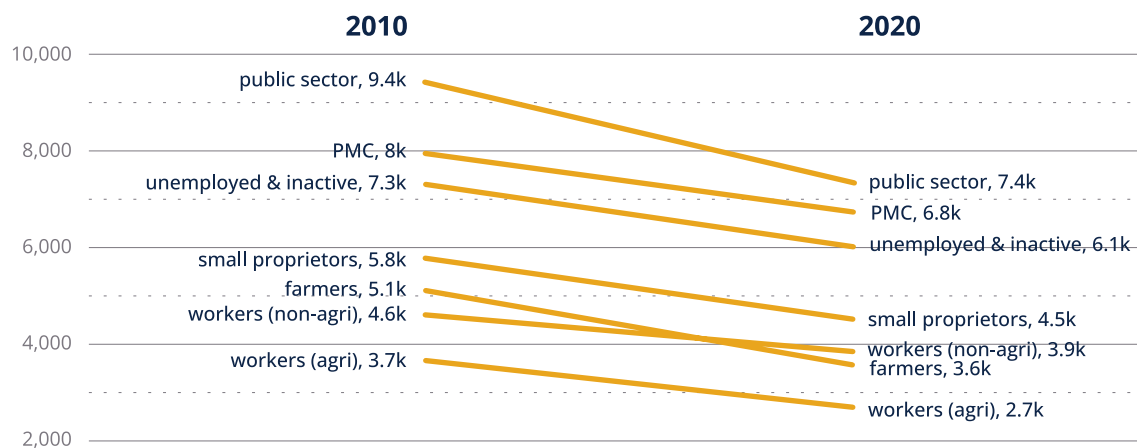
13. See [Methodology](#) (p 4) for details.

14. Confidence intervals are in part a function of sample size. As a result, smaller sampled groups, such as farm workers, tend to be associated with a larger confidence interval.

can be distinguished. The worst performers are rural groups reliant on the agricultural sector, such as farmers and farm workers. These agricultural households reduced their spending by between 26 and 30 percent over the course of the 2010s.<sup>15</sup> Performing relatively better than the first group but worse than the overall average are small proprietors and households tied to the public sector. Median expenditures for these classes fell by about 21 percent. The third and best-performing set of classes consists of the private-sector professional-managerial classes and non-farm manual workers. Median expenditures among these more urban, private-sector, wage-earning groups fell by between 15 and 16 percent.<sup>16</sup>

To get a better sense of the impoverishment of these major social classes, Figure 5 plots the total decline in median household expenditure by occupational class between 2010 and 2020. First and foremost, the graph visualises the economic standing of each class. Public sector households are generally the wealthiest, spending on average \$7400 international dollars and comprising Iran's upper middle class. They are followed by the professional-managerial class (PMC) and unemployed and inactive populations, a large proportion of which are comprised of pensioners and former public sector workers, as well as other inactive families reliant on international remittances or rents.<sup>17</sup> These groups, respectively, spent 9 and 21 percent less on average than public sector workers. Small proprietors, non-farm workers and farmers come next, spending almost 50 percent less than the public sector. At least in 2010, small proprietors and farmers might often still enjoy a middle-class lifestyle.<sup>18</sup> Non-farm workers tend to spend significantly more than farm workers, who are Iran's poorest occupational class.

**Figure 5: Median annual household expenditure by occupational class, 2010-20 per capita, using constant 2020 international \$**



15. More so than other groups, agriculturalists are exposed to climate change and drought, which likely also affected their fortunes in this period. See for instance: Marzieh Keshavarz, Ezatollah Karami and Frank Vanclay, "The Social Experience of Drought in Rural Iran," *Land Use Policy* 30, no. 1 (January 1, 2013): 120–29, <https://doi.org/10.1016/j.landusepol.2012.03.003>.

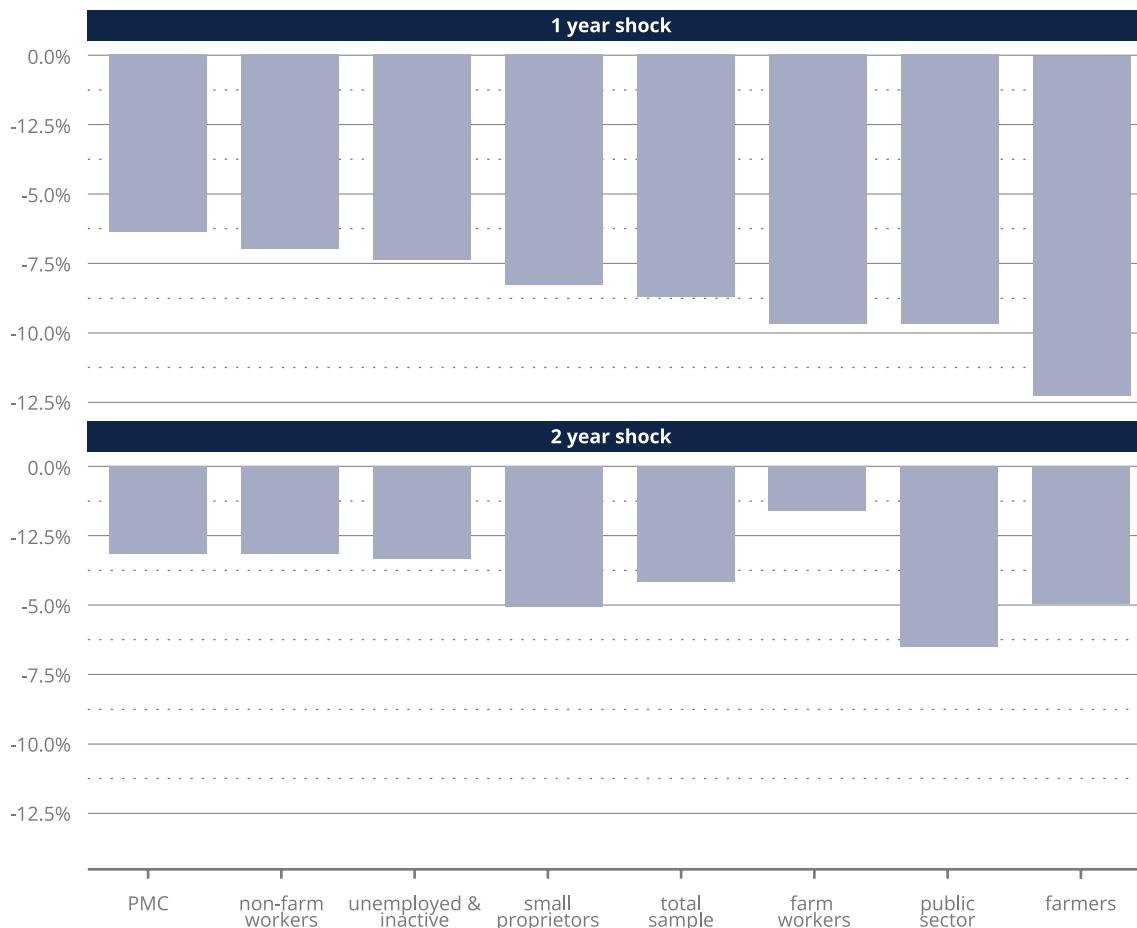
16. The unemployed and economically inactive population is a more heterogeneous group, including job-seekers, various unemployed groups, pensioners, and landlords. They will not be discussed in this report on labour market participation. Estimates for this group are only included for informative and reference purposes.

17. This latter group is of course internally highly heterogeneous, including a major segment of poor and unemployed families.

18. Ali Shakoori, "Rural Development in Iran: A Survey of Policies and Outcomes," *Journal of Developing Societies* 35, no. 3 (September 9, 2019): 1–21.

Figure 5 shows that by and large the relative standing of social classes was maintained over the course of the 2010s. There are nevertheless two significant shifts in class inequality in Iran during this period. First, the spending gap between the public sector and professional-managerial households fell dramatically, indicating the declining economic status of state employment.<sup>19</sup> Second, median household spending among the peasantry imploded. In 2010, a typical farming household spent only about 10 percent less than the typical small proprietor family and 10 percent more than the typical non-farm worker family. By 2020, a typical farming household spent almost 10 percent less than the typical non-farm worker family and sometimes as little as agricultural worker families.

**Figure 6: The impact of two sanction rounds on household budgets**  
Average change in median household spending (constant 2020 international \$)



Note: One-year shock periods are 2013 and 2019. The two-year shock periods are 2012–13 and 2018–19.

Which occupational groups were most impacted by sanctions? To more precisely isolate the effect of sanctions, Figure 6 plots the average change in median household spending for both one- and two-year shock periods. These shock periods cover the years when sanctions most

19. This finding contributes to recent assessments of Iran's "middle class poor". Nazli Kamvari, *In the Middle, on the Edge: Essays on Iran's Middle Class Poor* (Stichting Radio Zamaneh, 2022).

severely impacted the economy, namely 2012–13 and 2018–19 (2013 and 2019 are the single-year shock periods).<sup>20</sup> Regardless of whether a one- or two-year timeframe is used, the results indicate that sanctions impacted agricultural classes and public sector households on average more adversely than other groups. Using only data from 2013 and 2019, farmers are the worst affected. Farmers' median household spending decreased by an estimated average of 12.2 percent. Public sector and farm worker households also performed worse than the average, with median budgets for both groups falling an estimated 9.7 percent. Using a two-year frame, public sector households performed worse than other groups. Their median spending over these four years on average fell by an estimated 6.5 percent per year. Using this longer shock period, small proprietors performed as poorly as farmers, with median household budgets for these two groups falling by an estimated 5.1 and 5 percent annually.

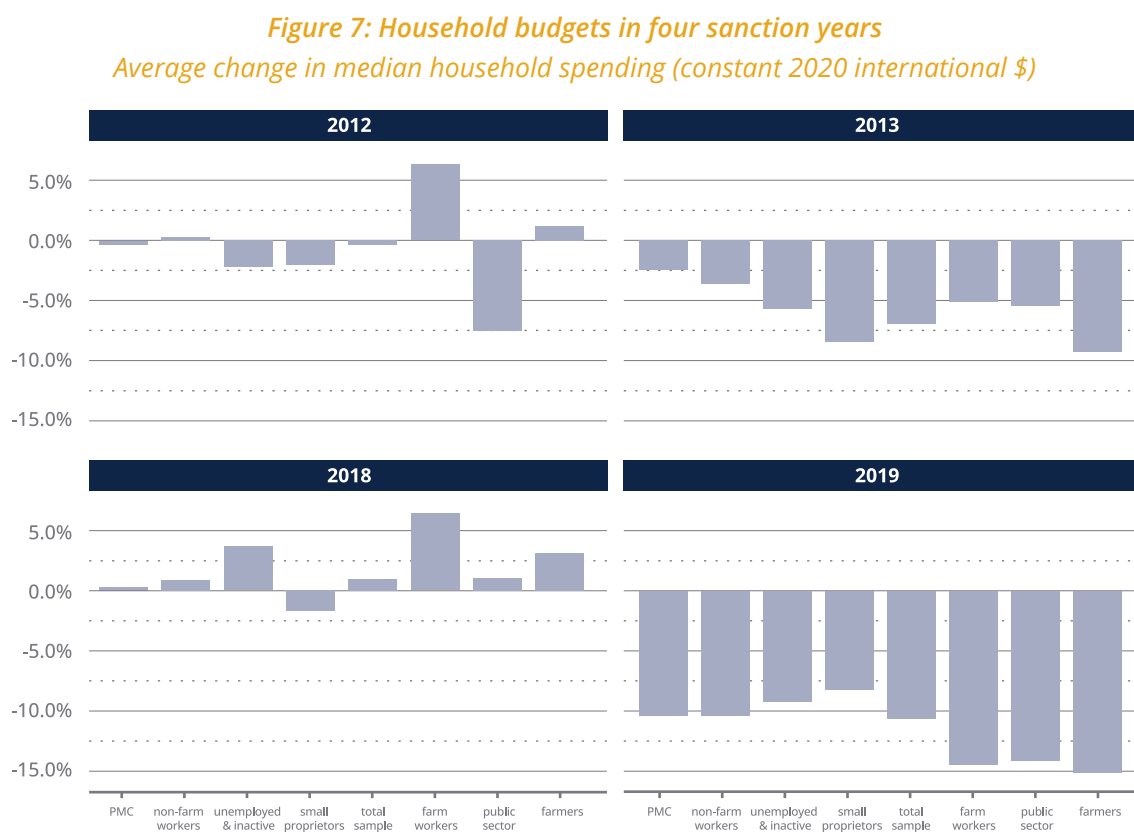


Figure 7 further disaggregates these findings into the four years when sanctions hit households hardest. This figure highlights variations in the impacts of the two rounds of sanctions. The first round was marked by a particularly severe drop in spending among public sector households. Falling public sector spending might be a result in part of lower state payrolls, as the government anticipated lower revenues due to sanctions. But in part, this fall is also a result of subsidy reforms, which benefitted lower-income groups more than higher-

20. More on the relative advantages of two- vs one-year periods to evaluate shock effects can be found in [Methodology](#) (p 4).

income groups, such as public sector households.<sup>21</sup> Moreover, household spending for both farmers and farm workers improved more than other groups in 2012 and 2018, followed by severe cutbacks in 2013 and 2019. This also suggests cross-class differences in the timing of the effect of sanctions. A final difference between these two periods is that the impact of the first round of sanctions appeared both less severe and more uneven. While public sector households and farmers reduced their spending significantly, the impact on the PMC and workers appears less severe. By contrast, in 2018–19, and especially in 2019 alone, median spending estimates fell by precipitous amounts across all registered classes.

In short, sanctions impacted households differently based on their positions in the labour market. Agricultural groups and households tied to the public sector were on average hit harder by sanctions. These findings have important implications for our understanding of the broader effects of sanctions. Notably, in Iran, female labour-force participation is largely concentrated in public sector employment and agriculture.<sup>22</sup> Iran's civilian administration only employs 15 percent of the total labour force, but almost half of its cadre consists of women. Because women's participation in the labour force is low (about 15 percent according to the ILO) around a third of working women are likely employed by the government. Another 20 percent of women are employed in agriculture, according to ILO data. This means that more than half of all working women are concentrated in the agricultural and public sectors. Sanctions impacted these sectors more than others, and thus disproportionately impacted working women.<sup>23</sup> The same is true for many of Iran's ethnic and religious minorities, which tend to be more reliant on agricultural work. By contrast, the male-dominated private sectors were spared the worst effects of the sanctions.<sup>24</sup>

21. In fact, subsidy reforms were largely designed to reduce excessive spending on the public sector. Across the MENA region, public sectors remain highly remunerated given these countries' state of development. See World Bank, "Public Employment and Governance in Middle East and North Africa" (n 8).

22. Valentine M. Moghadam, "Hidden from History? Women Workers in Modern Iran," *Iranian Studies* 33, no. 3/4 (2000): 377–401; Fatemeh Etemad Moghadam, "Undercounting Women's Work in Iran," *Iranian Studies* 42, no. 1 (2009): 81–95; Roksana Bahramitash and Hadi Salehi Isfahani, *Veiled Employment: Islamism and the Political Economy of Women's Employment in Iran*, Contemporary Issues in the Middle East (Syracuse University Press, 2011); Pooya Alaedini and Mohamad Reza Razavi, "Women's Participation and Employment in Iran: A Critical Examination," *Critique: Critical Middle Eastern Studies* 14, no. 1 (March 1, 2005): 57–73, <https://doi.org/10.1080/10669920500057062>.

23. Other studies also highlight these gendered and minority effects. See for instance: Laudati and Pesaran, "Identifying the Effects of Sanctions on the Iranian Economy Using Newspaper Coverage"; Demir and Tabrizy, "Gendered Effects of Sanctions on Manufacturing Employment"; Ghomi, "Who Is Afraid of Sanctions?"

24. One could, by extension, make the argument that Iran's relatively small public sector helps to insulate the country from the negative economic effects of international pressure. For an analysis of the relationship between informality and sanctions, see Bryan Early and Dursun Peksen, "Searching in the Shadows: The Impact of Economic Sanctions on Informal Economies," *Political Research Quarterly* 72, no. 4 (December 1, 2019): 821–34, <https://doi.org/10.1177/1065912918806412>.

## ▷ Political class coalitions mediated the effect of sanctions

This section evaluates how ruling coalitions mediated the impact of sanctions and sanctions relief on households, and what that in turn can tell us about the Mahmoud Ahmadinejad (2005–13) and Hassan Rouhani (2013–21) administrations. Scholars have shown that the socioeconomic effects of sanctions tend to be mediated by political institutions and the composition of ruling coalitions.<sup>25</sup> Political elites usually favour certain constituents and social groups over others. Yet, those preferences often are not obvious until a shift in resources forces governments to make determined spending or austerity decisions. Thus, sanctions and sanctions relief operate as a type of ‘shock’ that can teach us more about economic policy and distributional politics in Iran.

Observers often note that the Ahmadinejad administration had its social base among non-urban voters, working classes and lower-income groups. Yet, during Ahmadinejad’s first term (2005–9), all major groups benefitted from overall economic growth and large oil rents.<sup>26</sup> Moreover, Ahmadinejad raised public sector salaries significantly in 2009 to help him get re-elected – a common practice in Iran. To describe Ahmadinejad’s redistributive politics in his second term, Figure 8 depicts the average change in median household spending by occupational class between 2009 and 2013. The groups are ranked in descending order based on average household budget growth during the entire four-year period, with dots indicating the overall estimates for this duration. Bars indicate budgetary growth during two subperiods: before sanctions (2009–11) and after sanctions were imposed (2012–13).

25. Lee Jones, *Societies Under Siege: Exploring How International Economic Sanctions (Do Not) Work* (Oxford University Press, 2015).

26. Djavad Salehi-Isfahani, “Oil Wealth and Economic Growth in Iran,” in *Contemporary Iran: Economy, Society, Politics*, ed. Ali Gheissari (Oxford: Oxford University Press, 2009), 3–37.

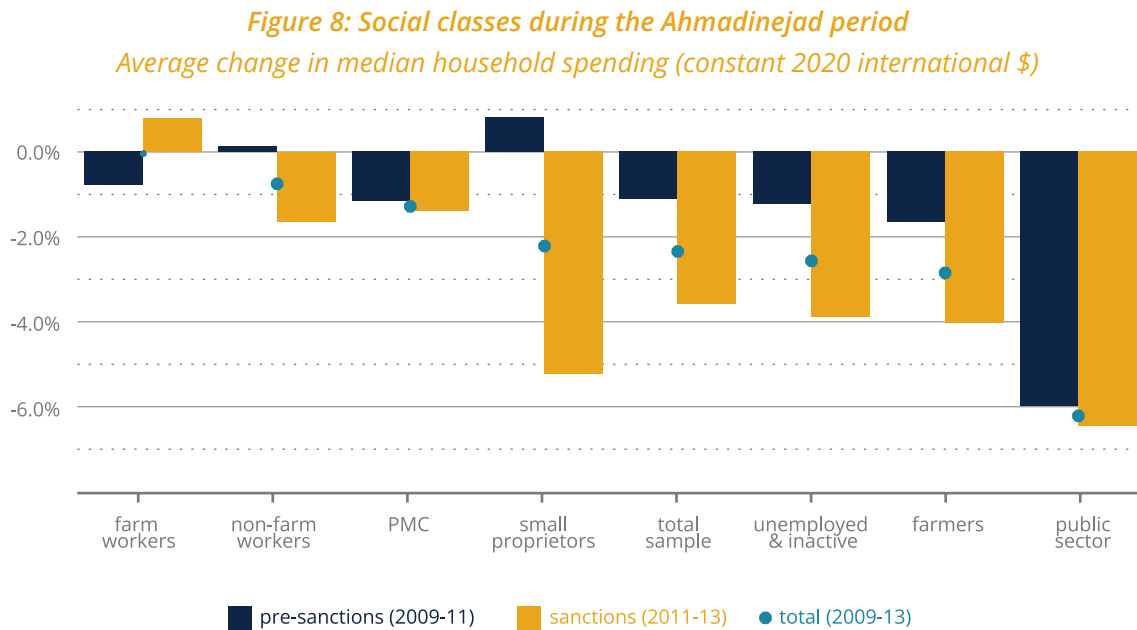


Figure 8 powerfully depicts the winners and the losers, in relative terms, of the second Ahmadinejad administration. In the 2009–13 period, urban and rural workers saw the smallest losses in household spending, followed by members of the professional–managerial class and small proprietors. Farmers and especially public sector households experienced the largest spending cuts. Median household spending fell annually by 0.1 percent for farm workers, 0.7 percent for non-farm workers, and 1.2 percent for the professional–managerial class.<sup>27</sup> The 2011 cash transfer scheme likely proved strong protection against the adverse effects of sanctions on household spending. All other groups experienced significantly higher drops in median household spending, ranging from an estimated 2.2 percent for small proprietors to 6.2 percent for the public sector.

It should be noted that small proprietors and business owners, often seen as one of Ahmadinejad’s principal support groups, were not substantially protected by the government from sanctions in 2012–13. This might help explain why many of them likely voted for Rouhani in 2013.<sup>28</sup> Farmers, another Ahmadinejad constituency during his first term, suffered tremendously in his second term.<sup>29</sup> This observation also supports the hypothesis that many farmers voted reformist in 2013 because Ahmadinejad had failed to protect them from the impact of sanctions. Median household spending among farmers was already falling precipitously prior to sanctions, but sanctions likely exacerbated the trend.<sup>30</sup>

27. The PMC is exceptional insofar as median household spending for this group remained flat during Ahmadinejad’s first term (2005–9). This is while spending for all other groups grew. Thus, the PMC is not a main beneficiary of Ahmadinejad’s presidency.

28. For a general overview of voting in the 2013 elections, see: Kevan Harris and Daniel Tavana, “Voter Behavior and Political Mobilization in Iran: Findings from the Iran Social Survey” (Lund, Sweden: European Middle East Research Group, January 2018), <https://doi.org/10.26369/RE.2018.001>.

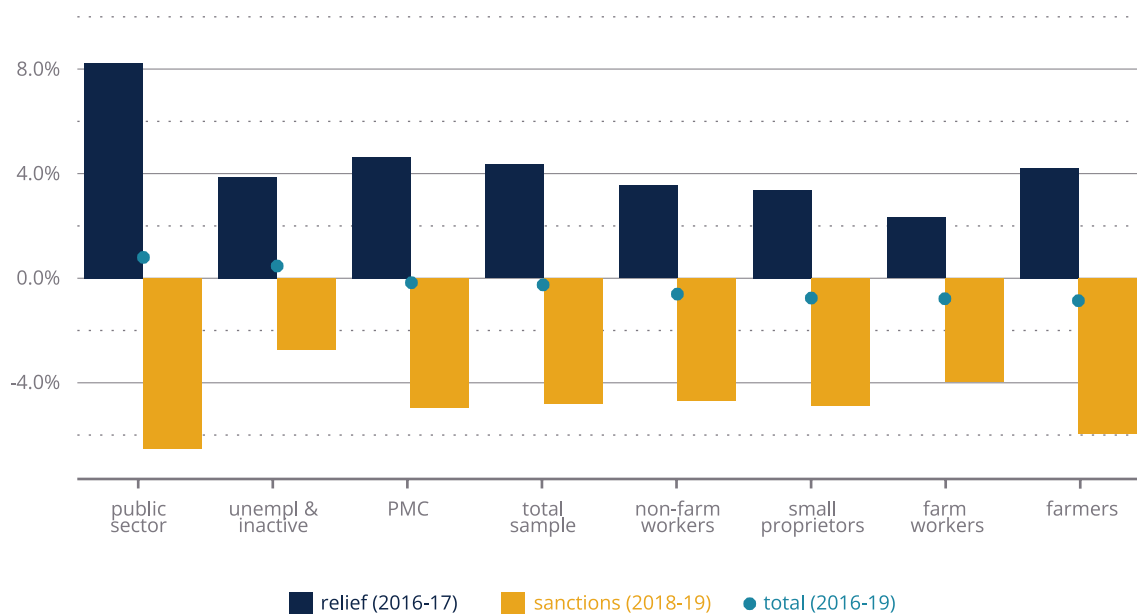
29. Eric Hooglund, “Thirty Years of the Islamic Revolution in Rural Iran,” *Middle East Report*, no. 250 (2009).

30. Ahmadinejad’s failure to protect farmers and small proprietors from 2009 to 2013 may have contributed to Rouhani’s resounding victory in 2013. For a discussion of the Rouhani vote among mostly rural and provincial minority groups, see Rasmus Christian Elling, “Tribal Hands and Minority Votes: Ethnicity, Regionalism and Elections in Iran,” *Ethnic and Racial Studies* 38, no. 14 (November 14, 2015): 2534–50, <https://doi.org/10.1080/01419870.2015.1061135>.



By far the most significant victim of Ahmadinejad's second administration (2009-13) was the public sector, whose salaries are determined directly by government mandate. The Ahmadinejad government had already scaled back spending on this group after his 2009 electoral victory. Moreover, subsidy reforms were largely designed to reduce government transfers to higher-earning groups and divide it more equally among the general population. The government also did not hesitate to impose austerity on the public sector in response to sanctions. In short, the conservative Ahmadinejad administration courted a broad and popular coalition starting in 2005, but, in its second term, it was only willing and able to protect some of its constituents – notably farm and non-farm workers – and not others, particularly independent farmers and small proprietors.

**Figure 9: Social classes during the Rouhani period**  
Average change in median household spending (constant 2020 international \$)



Support for the populist and conservative Ahmadinejad administration from the professional-managerial class and public sector had likely always been more conditional. But the moderate Hassan Rouhani, like reform-minded presidents before him, aimed to mobilise these urban middle classes. Given his high share of the 2013 electoral vote, Rouhani was also likely supported by many farmers and small proprietors who were upset and disillusioned by Ahmadinejad's failure to protect them. Because the first years of the Rouhani presidency were marked by continuing sanctions and low growth, I focus here on the two-year sanction relief period (2016–17), which operated as a positive income shock, and the sanction reimposition period (2018–19). The sanction relief period falls within Rouhani's first term. The sanction reimposition years are the first two years of his second term.

Figure 9 displays the 2016–19 period of both sanctions relief and re-imposition. While classes are similarly ranked according to their overall performance and the red bars show budgetary

growth during the sanctions period (2016–17) , the green bars indicate the sanctions relief period (2018–19). The figure shows that sanction relief under Rouhani largely benefitted his administration's main support groups. Notably, Rouhani spent additional oil revenues on the public sector – a middle-class constituency that could be more easily and directly reached by political elites.<sup>31</sup> Median spending among public sector households increased strongly in the relief period, growing by an estimated 8.2 percent annually in 2016–17. Farmers and the professional-managerial class were other main beneficiaries of sanction relief, with median spending for both groups growing above 4 percent annually in 2016 and 2017.

Like Ahmadinejad, the Rouhani administration failed to protect his main support groups from the reimposition of sanctions in 2018. Urban middle-class groups tended to suffer more from sanctions than other classes. The Rouhani administration willingly imposed harsh austerity on the public sector. This urban middle-class constituency became the principle victim of sanctions in 2018–19, wiping out most of the spending gains made by this group in 2016–17. The same is true for the professional-managerial class, which saw a median spending decline of 4.7 percent in the 2018–19 period, which left this group with overall negative growth for the period. After public sector households, farmers were hit hardest by the reimposition of sanctions. Small proprietors, which in particular had suffered from the initial round of sanctions, were better able to protect their livelihoods in the wake of the second round. Farm and non-farm workers, which had benefitted less from sanction relief than other groups, also suffered relatively less under their reimposition. In part, it is likely that these lower-income groups were already spending close to their minimums for purposes of social reproduction, making further spending cuts difficult.

---

31. Severe government austerity after 2017 also helps explain why public sector workers took to the street in such large numbers in the late 2010s and early 2020s. These workers likely felt betrayed by Rouhani's earlier promises to improve their living standards. See Zep Kalb, "Eyeing Oil Revenues, Iran's Public Sector Workers Demand Higher Wages", *Bourse and Bazaar Foundation*, March 30, 2022. Available at: <https://www.bourseandbazaar.com/articles/2022/3/30/irans-public-sector-takes-to-the-streets-in-budget-showdown?rq=kalb>



## Despite sanctions, policymakers extended social protection

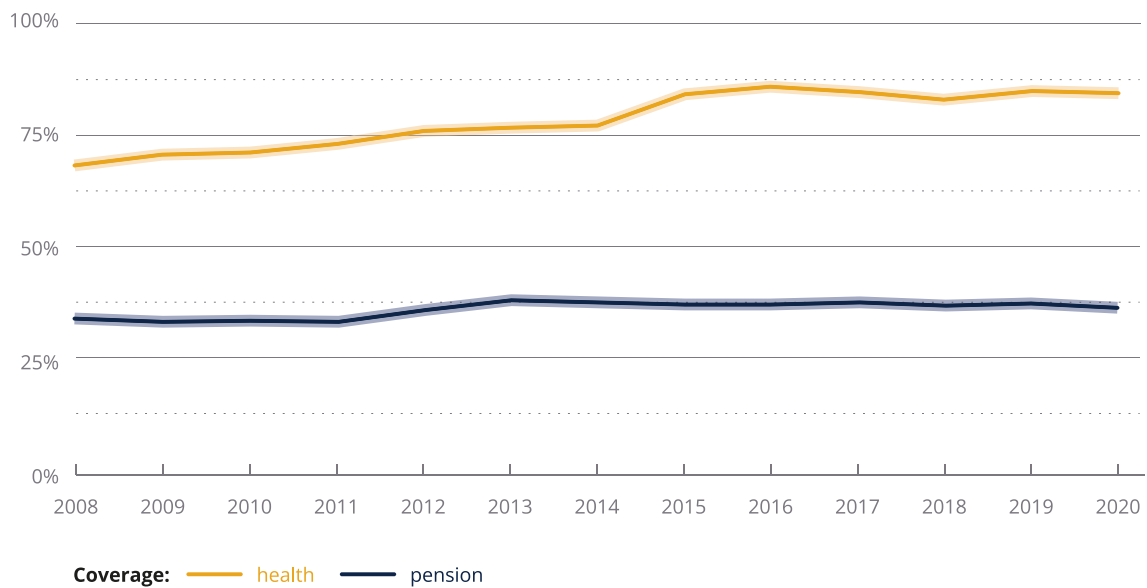
Studies have documented how sanctions negatively affected Iran's healthcare system and its welfare state. For instance, trade restrictions made it difficult or expensive to import certain medicine.<sup>32</sup> Sanctions-related austerity also reduced the quality of services, government monitoring and state capacity while deepening the financial issues facing pension funds in Iran.<sup>33</sup> Despite these concerns, findings from the HEIS also suggest a silver lining: Iranian policymakers managed to cushion the detrimental effect of sanctions on access to healthcare, social security and formal labour markets. This appears largely to have been a product of pre-existing institutions, highlighting the relative strength and robustness of parts of the Iranian welfare state.<sup>34</sup>

Figure 10 plots the overall rates of pension and healthcare coverage in the 2010s. Between 2010 and 2020, pension and healthcare coverage increased. Healthcare coverage was extended to millions of hitherto excluded Iranian households, climbing from 71 to an estimated 84 percent of all households in 2020. Relative to healthcare, pension coverage, which is an indicator of labour formality, experienced lukewarm growth rates, increasing from 34 to 37 percent between 2010 and 2020.

32. Shohreh Shahabi, et al., "The Impact of International Economic Sanctions on Iranian Cancer Healthcare," *Health Policy* 119, no. 10 (October 1, 2015): 1309–18, <https://doi.org/10.1016/j.healthpol.2015.08.012>

33. Kevan Harris, "Iran's Government Expenditure Priorities and Social Policy Burdens During Sanctions" (SAIS, Johns Hopkins University, Washington, D.C., 2020)

34. This hypothesis is supported by scholarly findings on the role of welfare in structuring of post-revolutionary politics. See: Kevan Harris, *A Social Revolution: Politics and the Welfare State in Iran* (University of California Press, 2017); Pooya Alaedini, ed., *Social Policy in Iran: Main Components and Institutions* (London: Routledge, 2021).

**Figure 10: Health and social insurance coverage (2008-20)**

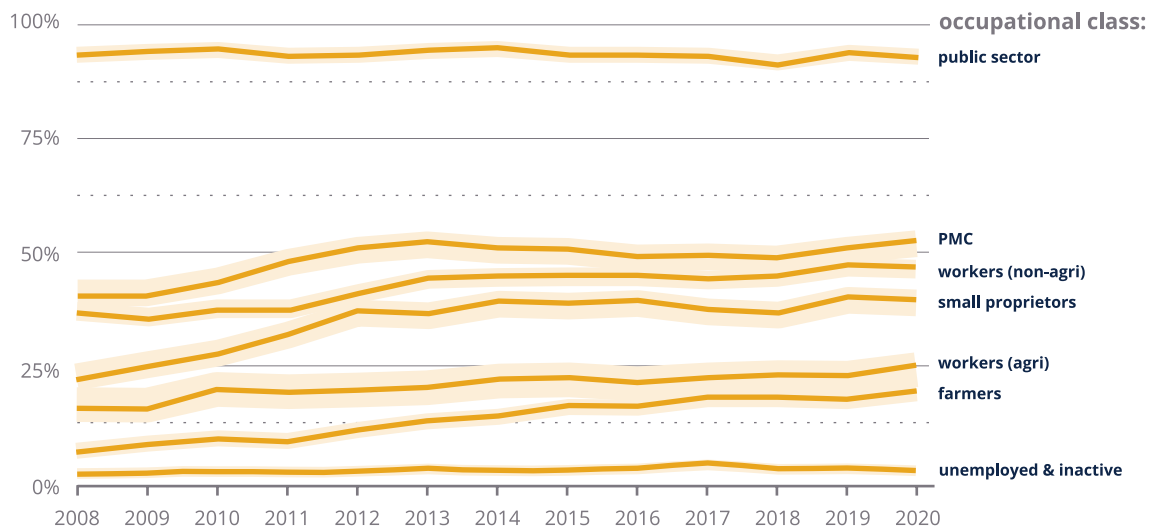
Note: Estimates include 95% confidence bands.

Even if most Iranian households already had access to healthcare at the start of the sanctions period, both the Ahmadinejad and the Rouhani administrations continued policies that expanded access to new population groups. Figure 10 shows that, after sanctions were tightened in 2011, healthcare coverage, as measured by insurance rates, continued to climb steadily, following the trend. It thus appears that earlier policies were effectively maintained and protected in the face of international economic pressure. In the wake of his victory in 2013, Rouhani also implemented new policies designed to expand healthcare coverage. HEIS data shows that these policies had a positive short-term impact. Between 2014 and 2016, healthcare coverage expanded rapidly, climbing from 77 to 86 percent. Yet, these gains were mostly short-lived, likely due to a combination of sanctions and growing political or administrative unwillingness.<sup>35</sup> Coverage rates effectively fell in 2017–18, returning to their long-term trend by 2019–20.<sup>36</sup>

HEIS data also suggests that sanctions did not reduce access to pension plans in Iran. Like healthcare, social insurance coverage experienced a continuation of its long-run trajectory. In the case of pensions, this was mostly a flat trend. Only around a third of all sampled households reported pension plan expenditures, and this remained so for the 2008–20 period. Because access to social insurance is low, there was also significantly more room for class-based inequality. Figure 11 plots social insurance rates by social class. The figure highlights the degree to which labour market formality and pension insurance remain tied to labour market participation and the type of employer.

35. Rouhani-care thus appears not as successful as was initially projected.

36. For a recent discussion of health policy and coverage, see Ali Hassanzadeh, "Iran's Health Policy and Healthcare System: Achievements and Challenges," in *Social Policy in Iran*, ed. Pooya Alaedini (Routledge, 2021).

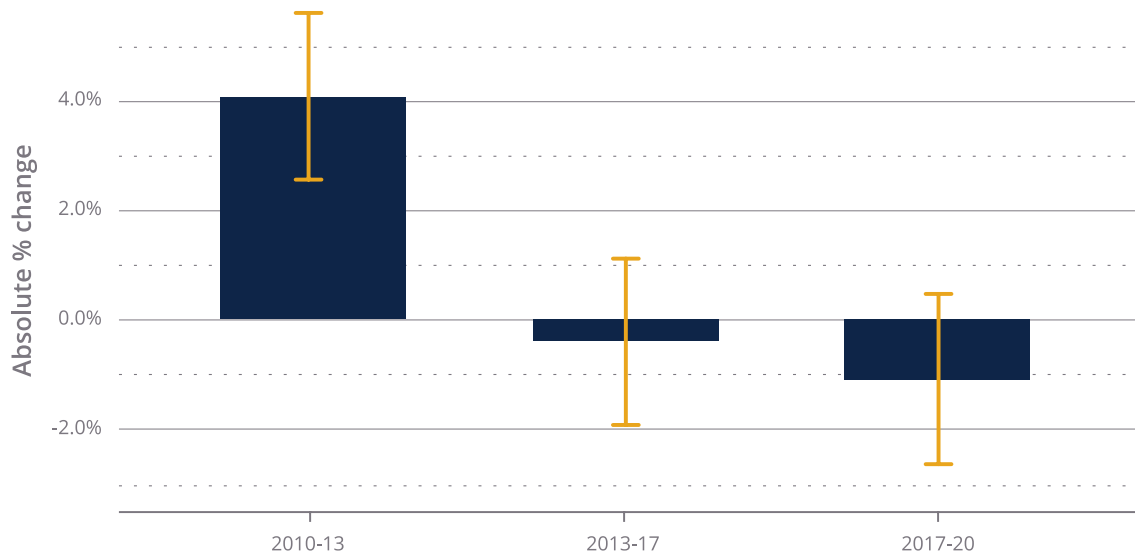
*Figure 11: Social insurance coverage (2008-20)*

Note: Estimates include 95% confidence bands.

Public sector households maintained the highest rates of social protection. Social insurance rates in the 2010s averaged 93.4 percent for this group. Access to pension coverage for other working groups was far lower. Thus, more urban classes, such as the professional-managerial class, non-farm workers and small proprietors, had social insurance coverage averaging between 37 and 50 percent. For agricultural classes such as farmers and farm workers, coverage rates averaged between 16 and 23 percent. Among non-active and unemployed households about 4 percent were covered by a pension plan.

Although governments largely failed to increase social insurance coverage or reduce inequalities between social classes in terms of access, policy was likely important in cushioning the impact of sanctions. To show this in more detail, Figure 12 plots changes in pension coverage in the 2010s for four sub-periods, including 95 percent confidence intervals. HEIS data suggests that the Ahmadinejad administration successfully extended social insurance to groups that previously had not had it. Pension coverage increased by an estimated 4 percent between 2010–13, despite sanctions. Although this figure is low in relative terms (and largely continued in late 2000s trends), in absolute terms it means that millions of Iranians gained access to pension plans. In comparison, even when the Iranian economy experienced sanctions relief in 2015–17, the Rouhani administration failed to extend social insurance in a meaningful way.

*Figure 12: Pension coverage across sanctions and the pandemic (2010-20)*  
*Absolute change in social insurance coverage by subperiod*



However, not all social classes benefitted equally from expanding social insurance coverage in the late 2000s and early 2010s. The main beneficiaries were non-farm manual workers, small proprietors and the professional-managerial class. Other working groups, such as agricultural labourers and farmers, benefitted less than these three groups did, whereas unemployed and non-working households did not benefit at all.

The Rouhani administration failed to replicate Ahmadinejad's successes with social insurance. Between 2013–17, social insurance rates remained largely stable, whereas they likely declined between 2017–20. A main contributing factor to declining coverage rates in 2017–20 is likely the COVID-19 pandemic, and not sanctions alone. As in many other countries, the pandemic and government lockdowns led to a drop in labour force participation, especially among women. The government failed to protect workers exiting the labour market, many of whom likely lost access to their pension plans.



# Conclusion

This report finds that sanctions negatively impacted household consumption and spending in Iran. These effects were delayed – it took time for households to adjust their expenditures to changing economic conditions – but they were highly significant. Sanction relief brought a brief respite for household spending. Between 2010-20, household spending also fell more steeply than overall GDP, suggesting that companies, wealthier individuals, and the government were able to disproportionately offload the cost of economic restructuring onto working families and consumers.

Importantly, the report finds that sanctions were classist: their impact on ordinary Iranians varied strongly by household position in the labour market. Sanctions disadvantaged two groups in particular: (i) households that depended on agricultural work, including independent farmers and agricultural labourers; and (ii) households employed in the public sector. Between 2010-20, rural classes increasingly constituted Iran's poorest groups – their plight worsened by factors such as mismanagement and drought – while public sector households continued to comprise Iran's more privileged strata. To a large extent, class effects were mediated by the country's ruling coalitions. The Ahmadinejad administration supported urban and rural working classes through the first round of sanctions in 2012-13, while failing to protect farmers and small proprietors. Ahmadinejad also imposed austerity on the public sector after 2009, a policy which sanctions served to enforce. By contrast, the Rouhani administration largely prioritised the urban middle classes, and professional-managerial and public sector groups benefitted more than others from sanction relief. Yet like Ahmadinejad, Rouhani moved to impose harsh austerity on these middle-class groups as sanctions were reimposed during his second term (2017-21).

These findings have important implications for scholars and Western policymakers alike. Several waves of mass protests in Iran, most recently the women-led protest movement united by the slogan, “Woman, Life, Freedom,” have raised questions about the role of sanctions in supporting Iranian demands for democracy, civil rights and government accountability. This report provides evidence that sanctions have severely hurt the economic standing of ordinary Iranians, including women and minorities. At the same time, the report finds that Iran's policymakers carry responsibility for the policies that they adopt to counter and cushion the various economic impacts of sanctions. Most notably, both reformist and conservative governments responded to sanctions by cutting commitments to their core constituents and support groups. The groups upon which Ahmadinejad and Rouhani had staked their electoral successes were often hit harder by sanctions than non-constituents. This was especially the case under Rouhani, who failed entirely to protect his urban, middle-class constituents from the impacts of sanctions. The unwillingness of governments to protect their core support groups – a feature of an increasingly authoritarian and unaccountable state – helps to explain why many citizens have become disillusioned with the ballot box and the country's political institutions.

Moreover, the sanctions' class biases reveal strong gender, ethnic and regional intersections that are important to note in the wake of the recent protest movements. Iranian women, ethnic minorities and citizens residing outside of major cities have become major participants in these protests. The report finds that many individuals in these marginalised groups belong to classes whose household budgets have suffered particularly hard under sanctions. Thus, ethnic minorities tend to live in more rural areas and tend to rely more on agricultural work. More than half of all working women are employed in either the agricultural or the public sectors. In other words, government policies to impose austerity on the public sector and channel resources away from the countryside are discriminating based on gender and ethnicity. Although certainly not the only factor, this helps to explain why many women no longer want to adhere to norms and rules that they increasingly have come to associate with an oppressive and uncaring state.

These findings sketch a pessimistic scenario. A revival of the JCPOA, or the conclusion of another type of agreement that grants Iran sanctions relief, will help to relieve economic hardship among ordinary Iranians, especially women and ethnic minorities. Sanctions relief might also re-activate a degree of factional competition in Iran, and thus breathe some life into Iran's political institutions. At the same time, it is not clear that Iranian policymakers have learned from their past mistakes. After more than a decade of sanctions and associated distributional politics, the social bargain upon which the Islamic Republic has staked its legitimacy appears in thorough need of repair. Yet, Iran's political elites do not appear interested in majority rule. It is unlikely that continued sanctions will reverse these trends. Thus, policymakers should work on changing the current sanctions regime in a way that reduces harm to ordinary Iranians. Iran's newly empowered citizens might be able to mobilize the resources they receive from such sanctions relief to make further claims on the government.



**Zep Kalb** is a Visiting Fellow (2021–2022) at the Bourse & Bazaar Foundation and a Ph.D. Candidate in the Department of Sociology at UCLA.



[www.bourseandbazaar.com](http://www.bourseandbazaar.com)

**Bourse & Bazaar Foundation**

10 Queen Street Place

London, EC4R 1BE United Kingdom