

**Labor Market Outlook:**

**January 2017**

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**SEVERE INCREASE IN UNEMPLOYMENT**

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**Executive Summary**

Seasonally adjusted labor market data show that nonagricultural unemployment rate increased by 0.4 points and reached 13.9 percent in the period of October 2016. The unemployment rate has been following an increase trend since May; however, it showed a limited decline in the previous period. In the period of October 2016, the number of people employed in agriculture, and construction declined by 69 thousand and 42 thousand whereas the number of people employed in industry and service sectors increased by 22 and 66 thousand, respectively. Parallel to these developments, nonagricultural labor force increased by 172 thousand and reached 25 million 592 thousand while the number of people employed in non-agricultural sectors grew by 46 thousand and increased to 22 million 35 thousand. As a result, the number of non-agricultural unemployed increased by 126 thousand and reached 3 million 557 thousand. Betam’s forecasting model predicts that the non-agricultural unemployment will remain constant at 13,9 percent level in the period of November.

**Strong increase in non-agricultural unemployment**

According to the seasonally adjusted labor market data, nonagricultural labor force increased by 172 thousand and reached 25 million 592 thousand while nonagricultural employment increased 46 thousand and reached 22 million 35 thousand compared to the period of September 2016 (Figure 1,Table 1). The number of people unemployed in nonagricultural sectors increase 126 thousand and nonagricultural unemployment rate reached 13.9 percent. We observe a strong increase in the number of unemployed due to the weak increase in the non-agricultural employment.

Figure 1 Seasonally adjusted non-agricultural labor force, employment, and unemployment



Source: Turkstat,Betam

**Nonagricultural unemployment rate is expected to remain constant in the period of November**

Betam's forecasting model had predicted that the seasonally adjusted nonagricultural unemployment rate would increase by 0.1 points and reach 13.6 percent level in October 2016. With 0.3 percentage point more than our forecast, non-agricultural unemployment rate in the period of October 2016 realized as 13.9 percent. Betam’s forecasting model predicts the seasonally adjusted November 2016 nonagricultural unemployment will remain constant at 13.9 percent level. Forecasting model details are available on Betam's website.[[4]](#footnote-4) Kariyer.net[[5]](#footnote-5) application per vacancy series used in the Betam forecasting model is depicted in Figure 1. Kariyer.net series is only one of the inputs of Betam forecast model. Indeed, several variables such as employment agency (İŞKUR) data, reel sector confidence index, capacity utilization rate are used in forecasting. Taken into account all these factors, Betam's forecasting model predicts that seasonally adjusted nonagricultural unemployment rate will remain constant in the period of November 2016.

Figure 2 Seasonally adjusted nonagricultural unemployment rate and application per vacancy



Source: Kariyer.net, Turkstat,Betam

**Employmet losses in agriculture and construction sectors**

According to seasonally adjusted sectoral labor market data, the number of people employed in agriculture, and construction declined by 69 thousand and 42 thousand, respectively. On the other hand, the number of people employed in industry and service sectors increased by 22 and 66 thousand, respectively (Figure 3, Table 2).[[6]](#footnote-6) We observe a slight recovery in services employment with a 66 thousand increase. Moreover, employment losses in industry sector that occured in last four periods stopped in October 2016. After having recorded a strong employment increase in the previous period, construction sector faced with employment losses in this period.

Figure 3 Employment by sectors (in thousands)



Source: Turkstat,Betam

**Strong increase in year-on-year unemployment persists**

From October 2015 to October 2016 the nonagricultural labor force increased by 1 million 101 thousand (4.5 percent) and nonagricultural employment increased by 579 thousand (2.7 percent) (Figure 4). Thus, the number of non-agricultural unemployed increased by 522 thousand (15.2 percent) in the period of October 2016. As expected, the annual increase in non-agricultural employment has slowed down. Moreover, the annual increase in non-agricultural labor force is over 1 million. Parallel to these developments, the number of unemployed people in non-agricultural sectors increased from 3 million 83 thousand to 3 million 605 thousand in the period of October 2015-October 2016.

Figure 4 Year-on-year changes in non-agricultural labor force, employment, and unemployment



Source: Turkstat,Betam

Strong increase in female labor force

Turkstat revised the labor market statistics drastically in February 2014. Within this framework, they back casted various labor market indicators and they also continued to announce seasonally adjusted series. However, Turkstat is not providing back-casted series by gender. Therefore, female and male labor market statistics are not sufficiently long for the seasonal adjustment procedures. Under these circumstances, we use the year-on-year changes in male and female labor market statistics to study the latest developments in the labor market. Figure 5 shows yearly non-agricultural employment (dark colors), non-agricultural labor force (light colors) for males (green) and for females (purple).

Figure 5 Year-on-year changes in nonagricultural labor force and employment by gender



Source: Turkstat,Betam

In October 2016, nonagricultural female labor force and nonagricultural male labor force increased by 661 thousand and 433 thousand respectively compared to October 2015. On the other hand, nonagricultural female employment increased by 318 thousand whereas the increase in nonagricultural male employment was limited to 261 thousand. The number of non-agricultural unemployed women and men increased by 343 thousand and 172 thousand, respectively. Compared to October 2015, the non-agricultural male unemployment rate grew from 10.5 percent to 11.2 percent and the non-agricultural female unemployment rate rose from 18.0 percent to 21.0 percent. We would like to note that, the yearly increase in female labor force in the period of October 2016 is the peak point of yearly increases occurred in the last year.

Table 1 Seasonally adjusted non-agricultural labor market indicators (in thousands)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   | **Labor force** | **Employment** | **Unemployment** | **Unemployment rate** | **Monthly changes** |
| **September-13** | 5843 | 5189 | 654 | 11.2% | **Labor force** | **Employment** | **Unemployment** |
| **October-13** | 5848 | 5193 | 655 | 11.2% | 5 | 4 | 1 |
| **November-13** | 5761 | 5133 | 628 | 10.9% | -87 | -60 | -27 |
| **December-13** | 5726 | 5096 | 630 | 11.0% | -35 | -37 | 2 |
| **January-14** | 5675 | 5056 | 619 | 10.9% | -51 | -40 | -11 |
| **February-14** | 6068 | 5388 | 680 | 11.2% | 393 | 332 | 61 |
| **March-14** | 6276 | 5573 | 703 | 11.2% | 208 | 185 | 23 |
| **April-14** | 6319 | 5605 | 714 | 11.3% | 43 | 32 | 11 |
| **May-14** | 6283 | 5567 | 716 | 11.4% | -36 | -38 | 2 |
| **June-14** | 6299 | 5568 | 731 | 11.6% | 15 | 1 | 14 |
| **July-14** | 6226 | 5485 | 741 | 11.9% | -73 | -83 | 10 |
| **August-14** | 6160 | 5396 | 764 | 12.4% | -66 | -89 | 23 |
| **September-14** | 6079 | 5331 | 748 | 12.3% | -81 | -65 | -16 |
| **October-14** | 6097 | 5329 | 768 | 12.6% | 19 | -2 | 21 |
| **November-14** | 6138 | 5371 | 767 | 12.5% | 41 | 42 | -1 |
| **December-14** | 6181 | 5402 | 779 | 12.6% | 42 | 31 | 11 |
| **January-15** | 6207 | 5431 | 776 | 12.5% | 26 | 29 | -3 |
| **February-15** | 6216 | 5445 | 771 | 12.4% | 9 | 14 | -5 |
| **March-15** | 6063 | 5311 | 752 | 12.4% | -153 | -134 | -19 |
| **April-15** | 6256 | 5480 | 776 | 12.4% | 193 | 169 | 24 |
| **May-15** | 6262 | 5498 | 764 | 12.2% | 6 | 18 | -12 |
| **June-15** | 6303 | 5521 | 782 | 12.4% | 41 | 23 | 18 |
| **July-15** | 6337 | 5545 | 792 | 12.5% | 35 | 24 | 11 |
| **August-15** | 6267 | 5496 | 771 | 12.3% | -70 | -49 | -21 |
| **September-15** | 6294 | 5520 | 774 | 12.3% | 27 | 24 | 3 |
| **October-15** | 6293 | 5519 | 774 | 12.3% | -1 | -1 | 0 |
| **November-15** | 6213 | 5443 | 770 | 12.4% | -80 | -76 | -4 |
| **December-15** | 6132 | 5384 | 748 | 12.2% | -81 | -59 | -22 |
| **January-16** | 6179 | 5425 | 754 | 12.2% | 47 | 41 | 6 |
| **February-16** | 6160 | 5415 | 745 | 12.1% | -18 | -10 | -8 |
| **March-16** | 6143 | 5406 | 737 | 12.0% | -17 | -9 | -8 |
| **April-16** | 6099 | 5379 | 720 | 11.8% | -45 | -27 | -18 |
| **May-16** | 6056 | 5341 | 715 | 11.8% | -43 | -38 | -5 |
| **June-16** | 6034 | 5292 | 742 | 12.3% | -21 | -49 | 28 |
| **July-16** | 5897 | 5130 | 767 | 13.0% | -138 | -162 | 24 |
| **August-16** | 6001 | 5203 | 798 | 13.3% | 105 | 73 | 32 |
| **September-16** | 6082 | 5255 | 827 | 13.6% | 81 | 52 | 29 |
| **October-16** | 6180 | 5346 | 834 | 13.5% | 98 | 91 | 7 |

 Source: Turkstat,Betam

Table 2 Seasonally adjusted employment by sectors (in thousands)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   | **Agriculture** | **Manufacturing** | **Construction** | **Service** | **Monthly changes** |
| **September-13** | 5193 | 5096 | 1781 | 12605 | **Agriculture** | **Manufacturing** | **Construction** | **Service** |
| **October-13** | 5133 | 5090 | 1859 | 12643 | -60 | -6 | 78 | 38 |
| **November-13** | 5096 | 5064 | 1794 | 12727 | -37 | -26 | -65 | 84 |
| **December-13** | 5056 | 5131 | 1893 | 12804 | -40 | 67 | 99 | 77 |
| **January-14** | 5388 | 5232 | 1932 | 12839 | 332 | 101 | 39 | 35 |
| **February-14** | 5573 | 5359 | 2012 | 12883 | 185 | 127 | 80 | 44 |
| **March-14** | 5605 | 5365 | 1957 | 13038 | 32 | 6 | -55 | 155 |
| **April-14** | 5567 | 5373 | 1895 | 13123 | -38 | 8 | -62 | 85 |
| **May-14** | 5568 | 5364 | 1871 | 13164 | 1 | -9 | -24 | 41 |
| **June-14** | 5485 | 5332 | 1828 | 13226 | -83 | -32 | -43 | 62 |
| **July-14** | 5396 | 5243 | 1816 | 13295 | -89 | -89 | -12 | 69 |
| **August-14** | 5331 | 5257 | 1858 | 13361 | -65 | 14 | 42 | 66 |
| **September-14** | 5329 | 5306 | 1874 | 13385 | -2 | 49 | 16 | 24 |
| **October-14** | 5371 | 5353 | 1905 | 13473 | 42 | 47 | 31 | 88 |
| **November-14** | 5402 | 5273 | 1939 | 13500 | 31 | -80 | 34 | 27 |
| **December-14** | 5431 | 5266 | 1935 | 13565 | 29 | -7 | -4 | 65 |
| **January-15** | 5445 | 5349 | 1925 | 13600 | 14 | 83 | -10 | 35 |
| **February-15** | 5311 | 5351 | 1876 | 13735 | -134 | 2 | -49 | 135 |
| **March-15** | 5480 | 5308 | 1919 | 13654 | 169 | -43 | 43 | -81 |
| **April-15** | 5498 | 5326 | 1898 | 13757 | 18 | 18 | -21 | 103 |
| **May-15** | 5521 | 5404 | 1867 | 13820 | 23 | 78 | -31 | 63 |
| **June-15** | 5545 | 5380 | 1856 | 13875 | 24 | -24 | -11 | 55 |
| **July-15** | 5496 | 5336 | 1911 | 13974 | -49 | -44 | 55 | 99 |
| **August-15** | 5520 | 5252 | 1920 | 14004 | 24 | -84 | 9 | 30 |
| **September-15** | 5519 | 5327 | 1937 | 14110 | -1 | 75 | 17 | 106 |
| **October-15** | 5443 | 5363 | 1954 | 14123 | -76 | 36 | 17 | 13 |
| **November-15** | 5384 | 5353 | 1987 | 14226 | -59 | -10 | 33 | 103 |
| **December-15** | 5425 | 5311 | 1988 | 14282 | 41 | -42 | 1 | 56 |
| **January-16** | 5415 | 5300 | 2002 | 14372 | -10 | -11 | 14 | 90 |
| **February-16** | 5406 | 5276 | 2018 | 14407 | -9 | -24 | 16 | 35 |
| **March-16** | 5379 | 5295 | 2055 | 14522 | -27 | 19 | 37 | 115 |
| **April-16** | 5341 | 5381 | 2058 | 14563 | -38 | 86 | 3 | 41 |
| **May-16** | 5292 | 5386 | 2042 | 14601 | -49 | 5 | -16 | 38 |
| **June-16** | 5130 | 5330 | 1936 | 14623 | -162 | -56 | -106 | 22 |
| **July-16** | 5203 | 5254 | 1937 | 14646 | 73 | -76 | 1 | 23 |
| **August-16** | 5255 | 5224 | 1926 | 14665 | 52 | -30 | -11 | 19 |
| **September-16** | 5346 | 5260 | 2023 | 14706 | 91 | 36 | 97 | 41 |
| **October-16** | 5277 | 5282 | 1981 | 14772 | -69 | 22 | -42 | 66 |

Source: Turkstat,Betam

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4. For detailed information on Betam's forecasting model, please see Betam Research Brief 168 titled as "Kariyer.net Verisiyle Kısa Vadeli Tarım Dışı İşsizlik Tahmini"

<http://betam.bahcesehir.edu.tr/tr/2014/06/kariyer-net-verisiyle-kisa-vadeli-tarim-disi-issizlik-tahmini/> [↑](#footnote-ref-4)
5. Betam has been calculating application per vacancy using series released by Kariyer.net for a while. Seasonal and calendar adjustment procedure is applied to application per vacancy series. A decrease in applications per vacancy may be caused by an increase in vacancies or by a decrease in the number of applications. An increase in vacancies signals economic growth while decreasing number of applications indicates a decrease in number of people looking for a job. Monthly labor market series released by TurkStat is the average of three months. Therefore, application per vacancy statistics calculated using Kariyer.net series is the average of three months as well. [↑](#footnote-ref-5)
6. Employment in each sector is seasonally adjusted separately. Hence the sum of these series may differ from the seasonally adjusted series of total employment. The difference stems from the non-linearity of the seasonal adjustment process. [↑](#footnote-ref-6)