

**Labor Market Outlook:**

**February 2017**

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**UNEMPLOYMENT CONTINUES TO INCREASE**

**Seyfettin Gürsel[[1]](#footnote-1)\* Gökçe Uysal[[2]](#footnote-2)\*\* and Selin Köksal [[3]](#footnote-3)\*\*\***

**Executive Summary**

Seasonally adjusted labor market data show that nonagricultural unemployment rate increased by 0.2 points and reached 14.1 percent in the period of November 2016. The increase in employment remained limited during the period of November 2016. The number of people employed in agriculture, construction, services and industry increased by 5 thousand, 9 thousand, 21 thousand and 34 thousand, respectively. On the other hand, the nonagricultural labor force increased by 135 thousand and reached 25 million 710 thousand while the number of people employed in non-agricultural sectors grew by 65 thousand and increased to 22 million 85 thousand. As a result, the number of non-agricultural unemployed increased by 70 thousand and reached 3 million 625 thousand. Betam’s forecasting model predicts that the non-agricultural unemployment will remain constant at 14,1 percent level in the period of December 2016.

**Non-agricultural unemployment continues to increase**

According to the seasonally adjusted labor market data, non-agricultural labor force increased by 135 thousand and reached 25 million 710 thousand while non-agricultural employment increased 65 thousand and reached 22 million 85 thousand compared to the period of October 2016 (Figure 1,Table 1). The number of people unemployed in nonagricultural sectors increase 70 thousand and nonagricultural unemployment rate reached 14.1 percent. In the period of November 2016, 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 December**

Betam's forecasting model had predicted that the seasonally adjusted nonagricultural unemployment rate would remain constant at the 13.9 percent level in November 2016. The non-agricultural unemployment rate in the period of November 2016 realized as 14.1 percent. Betam’s forecasting model predicts that the seasonally adjusted nonagricultural unemployment will remain constant at 14.1 percent level in December 2016. 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 December 2016.

**Figure 2 Seasonally adjusted nonagricultural unemployment rate and application per vacancy**

Source: Kariyer.net, Turkstat, Betam

**Sectoral employment increase remained insufficient**

According to seasonally adjusted sectoral labor market data, the number of people employed in construction, services and industry increased by 9 thousand, 21 thousand and 34 thousand, respectively (Figure 3, Table 2).[[6]](#footnote-6) Even though there was a decline in the construction sector employment in the period of October 2016, we observe a limited increase during this period. On the other hand, in the period of November 2016, we observe a weak employment increase in services compared to the previous period. Overall, it is striking that the employment increased in all sectors, yet these increases remained insufficient compared to the increase in the labor force.

Figure 3 Employment by sectors (in thousands)



Source: Turkstat, Betam

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

From November 2015 to November 2016 the nonagricultural labor force increased by 1 million 119 thousand (4.6 percent) and nonagricultural employment increased by 492 thousand (2.3 percent) (Figure 4). Thus, the number of non-agricultural unemployed increased by 627 thousand (20.6 percent) in the period of November 2016. We observe that the annual increase in non-agricultural employment has slowed down. Moreover, the annual increase in non-agricultural labor force is over 1 million 100 thousand. Parallel to these developments, the number of unemployed people in non-agricultural sectors exceeded 600 thousand in the period of November 2016.

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



Source: Turkstat, Betam

Female unemployment continues to increase rapidly

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 November 2016, nonagricultural female labor force and nonagricultural male labor force increased by 584 thousand and 526 thousand respectively compared to November 2015. On the other hand, nonagricultural male employment increased by 271 thousand whereas the increase in nonagricultural female employment was limited to 220 thousand. The number of non-agricultural unemployed women and men increased by 364 thousand and 255 thousand, respectively. Compared to November 2015, the non-agricultural male unemployment rate grew from 10.5 percent to 11.6 percent and the non-agricultural female unemployment rate rose from 17.3 percent to 21.0 percent

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Labor force** | **Employment** | **Unemployment** | **Unemployment rate** | **Monthly changes** | | |
| **October-13** | 21985 | 19589 | 2396 | 10,9% | **Labor force** | **Employment** | **Unemployment** |
| **November-13** | 22003 | 19583 | 2420 | 11,0% | 18 | -6 | 24 |
| **December-13** | 22250 | 19825 | 2425 | 10,9% | 247 | 242 | 5 |
| **January-14** | 22525 | 20002 | 2523 | 11,2% | 274 | 177 | 97 |
| **February-14** | 22806 | 20252 | 2554 | 11,2% | 282 | 250 | 32 |
| **March-14** | 22952 | 20358 | 2594 | 11,3% | 145 | 106 | 39 |
| **April-14** | 23015 | 20391 | 2624 | 11,4% | 63 | 33 | 30 |
| **May-14** | 23077 | 20400 | 2677 | 11,6% | 62 | 9 | 53 |
| **June-14** | 23142 | 20388 | 2754 | 11,9% | 65 | -12 | 77 |
| **July-14** | 23239 | 20357 | 2882 | 12,4% | 97 | -31 | 128 |
| **August-14** | 23352 | 20480 | 2872 | 12,3% | 114 | 123 | -9 |
| **September-14** | 23535 | 20570 | 2965 | 12,6% | 183 | 90 | 93 |
| **October-14** | 23687 | 20726 | 2961 | 12,5% | 151 | 156 | -5 |
| **November-14** | 23692 | 20707 | 2985 | 12,6% | 5 | -19 | 24 |
| **December-14** | 23728 | 20762 | 2966 | 12,5% | 36 | 55 | -19 |
| **January-15** | 23824 | 20870 | 2954 | 12,4% | 96 | 108 | -12 |
| **February-15** | 23927 | 20960 | 2967 | 12,4% | 103 | 90 | 13 |
| **March-15** | 23836 | 20880 | 2956 | 12,4% | -91 | -80 | -11 |
| **April-15** | 23925 | 20982 | 2943 | 12,3% | 89 | 102 | -13 |
| **May-15** | 24080 | 21094 | 2986 | 12,4% | 155 | 112 | 43 |
| **June-15** | 24130 | 21114 | 3016 | 12,5% | 50 | 20 | 30 |
| **July-15** | 24203 | 21226 | 2977 | 12,3% | 73 | 112 | -39 |
| **August-15** | 24154 | 21183 | 2971 | 12,3% | -49 | -43 | -6 |
| **September-15** | 24349 | 21378 | 2971 | 12,2% | 195 | 195 | 0 |
| **October-15** | 24474 | 21439 | 3035 | 12,4% | 125 | 61 | 64 |
| **November-15** | 24587 | 21563 | 3024 | 12,3% | 113 | 124 | -11 |
| **December-15** | 24605 | 21579 | 3026 | 12,3% | 18 | 16 | 2 |
| **January-16** | 24655 | 21672 | 2983 | 12,1% | 50 | 93 | -43 |
| **February-16** | 24657 | 21698 | 2959 | 12,0% | 2 | 26 | -24 |
| **March-16** | 24794 | 21868 | 2926 | 11,8% | 137 | 170 | -33 |
| **April-16** | 24942 | 21999 | 2943 | 11,8% | 149 | 131 | 18 |
| **May-16** | 25114 | 22025 | 3089 | 12,3% | 172 | 26 | 146 |
| **June-16** | 25154 | 21884 | 3270 | 13,0% | 40 | -141 | 181 |
| **July-16** | 25179 | 21830 | 3349 | 13,3% | 25 | -54 | 79 |
| **August-16** | 25209 | 21806 | 3403 | 13,5% | 30 | -24 | 54 |
| **September-16** | 25412 | 21981 | 3431 | 13,5% | 202 | 175 | 27 |
| **October-16** | 25575 | 22020 | 3555 | 13,9% | 163 | 39 | 124 |
| **November-16** | 25710 | 22085 | 3625 | 14,1% | 135 | 65 | 70 |

Source: Turkstat, Betam

Table 2 Seasonally adjusted employment by sectors (in thousands)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Tarım** | **Sanayi** | **İnşaat** | **Hizmetler** | **Aylık değişimler** | | | |
| **Ekim 13** | 5133 | 5090 | 1860 | 12643 | **Tarım** | **Sanayi** | **İnşaat** | **Hizmetler** |
| **Kasım 13** | 5095 | 5064 | 1794 | 12727 | -38 | -26 | -66 | 84 |
| **Aralık 13** | 5055 | 5131 | 1893 | 12804 | -40 | 67 | 99 | 77 |
| **Ocak 14** | 5387 | 5232 | 1932 | 12839 | 332 | 101 | 39 | 35 |
| **Şubat 14** | 5573 | 5359 | 2012 | 12883 | 186 | 127 | 80 | 44 |
| **Mart 14** | 5606 | 5365 | 1957 | 13038 | 33 | 6 | -55 | 155 |
| **Nisan 14** | 5568 | 5373 | 1895 | 13123 | -38 | 8 | -62 | 85 |
| **Mayıs 14** | 5568 | 5364 | 1871 | 13164 | 0 | -9 | -24 | 41 |
| **Haziran 14** | 5485 | 5332 | 1828 | 13226 | -83 | -32 | -43 | 62 |
| **Temmuz 14** | 5396 | 5243 | 1816 | 13295 | -89 | -89 | -12 | 69 |
| **Ağustos 14** | 5331 | 5257 | 1858 | 13360 | -65 | 14 | 42 | 65 |
| **Eylül 14** | 5329 | 5306 | 1874 | 13385 | -2 | 49 | 16 | 25 |
| **Ekim 14** | 5371 | 5353 | 1905 | 13472 | 42 | 47 | 31 | 87 |
| **Kasım 14** | 5401 | 5273 | 1938 | 13500 | 30 | -80 | 33 | 28 |
| **Aralık 14** | 5429 | 5266 | 1934 | 13565 | 28 | -7 | -4 | 65 |
| **Ocak 15** | 5445 | 5349 | 1924 | 13599 | 16 | 83 | -10 | 34 |
| **Şubat 15** | 5311 | 5351 | 1876 | 13735 | -134 | 2 | -48 | 136 |
| **Mart 15** | 5480 | 5308 | 1919 | 13654 | 169 | -43 | 43 | -81 |
| **Nisan 15** | 5498 | 5326 | 1898 | 13757 | 18 | 18 | -21 | 103 |
| **Mayıs 15** | 5521 | 5404 | 1867 | 13821 | 23 | 78 | -31 | 64 |
| **Haziran 15** | 5546 | 5380 | 1856 | 13875 | 25 | -24 | -11 | 54 |
| **Temmuz 15** | 5496 | 5336 | 1911 | 13974 | -50 | -44 | 55 | 99 |
| **Ağustos 15** | 5521 | 5252 | 1921 | 14004 | 25 | -84 | 10 | 30 |
| **Eylül 15** | 5520 | 5327 | 1937 | 14109 | -1 | 75 | 16 | 105 |
| **Ekim 15** | 5444 | 5363 | 1955 | 14121 | -76 | 36 | 18 | 12 |
| **Kasım 15** | 5382 | 5353 | 1986 | 14232 | -62 | -10 | 31 | 111 |
| **Aralık 15** | 5424 | 5311 | 1988 | 14285 | 42 | -42 | 2 | 53 |
| **Ocak 16** | 5414 | 5300 | 2002 | 14375 | -10 | -11 | 14 | 90 |
| **Şubat 16** | 5405 | 5276 | 2017 | 14409 | -9 | -24 | 15 | 34 |
| **Mart 16** | 5379 | 5295 | 2055 | 14522 | -26 | 19 | 38 | 113 |
| **Nisan 16** | 5341 | 5381 | 2058 | 14562 | -38 | 86 | 3 | 40 |
| **Mayıs 16** | 5292 | 5386 | 2042 | 14598 | -49 | 5 | -16 | 36 |
| **Haziran 16** | 5131 | 5330 | 1936 | 14617 | -161 | -56 | -106 | 19 |
| **Temmuz 16** | 5204 | 5254 | 1937 | 14638 | 73 | -76 | 1 | 21 |
| **Ağustos 16** | 5257 | 5224 | 1927 | 14653 | 53 | -30 | -10 | 15 |
| **Eylül 16** | 5347 | 5260 | 2023 | 14691 | 90 | 36 | 96 | 38 |
| **Ekim 16** | 5278 | 5282 | 1982 | 14756 | -69 | 22 | -41 | 65 |
| **Kasım 16** | 5283 | 5316 | 1991 | 14777 | 5 | 34 | 9 | 21 |

Source: Turkstat, Betam

1. **\***Prof. Dr. Seyfettin Gürsel, Betam, Director, seyfettin.gursel@eas.bau.edu.tr [↑](#footnote-ref-1)
2. \*\*Assc. Prof. Dr. Gökçe Uysal, Betam, Deputy Director, gokce.uysal@eas.bau.edu.tr [↑](#footnote-ref-2)
3. \*\*\* Selin Köksal, Betam, Research Assistant, selin.koksal@eas.bau.edu.tr [↑](#footnote-ref-3)
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. Sektörel istihdam serileri teker teker mevsim etkilerinden arındırılmaktadır. Dolayısıyla sektörel istihdam rakamlarının toplamı, mevsim etkilerinden arındırılmış toplam istihdam rakamından farklı olabilmektedir. Aradaki fark mevsim etkilerinden arındırma prosedürünün lineer olmamasından kaynaklanmaktadır. [↑](#footnote-ref-6)