

**Labor Market Outlook:**

**March 2017**

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**INCREASE IN UNEMPLOYMENT CONTINUES**

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**Executive Summary**

Seasonally adjusted labor market data show that nonagricultural unemployment rate increased by 0.2 points and reached 14.3 percent in the period of December 2016. We observe employment losses in industry and construction in the period of December 2016. The number of people employed in industry and construction decreased by 51 thousand and 28 thousand respectively, whereas the number of people employed in services and agriculture increased by 4 thousand and 39 thousand. In the period of December 2016, the nonagricultural labor force decreased by 28 thousand and declined to 25 million 637 thousand and the number of people employed in non-agricultural sectors decreased by 85 thousand and declined to 21 million 971 thousand. As a result, the number of non-agricultural unemployed increased by 47 thousand and reached 3 million 666 thousand. Betam’s forecasting model predicts that the non-agricultural unemployment will remain increase to 14.4 percent level in the period of January 2017.

**Decline in non-agricultural labor force and employment**

In the period of December 2016, the nonagricultural labor force decreased by 28 thousand and declined to 25 million 637 thousand and the number of people employed in non-agricultural sectors decreased by 85 thousand and declined to 21 million 971 thousand (Figure 1, Table 1). The number of people unemployed in nonagricultural sectors increased by 47 thousand and the nonagricultural unemployment rate reached 14.4 percent. The non-agricultural labor force in Turkey increases regularly. Since the non-agricultural labor force declined during this period, it has limited the increase in unemployment. However, due to the decrease in non-agricultural employment, the non-agricultural unemployment rate increased by 0.2 percentage points.

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



Source: Turkstat, Betam

**Nonagricultural unemployment rate is expected to increase in the period of January 2017**

Betam's forecasting model had predicted that the seasonally adjusted nonagricultural unemployment rate would remain constant at the 14.1 percent level in the period of December 2016. The non-agricultural unemployment rate in the period of December 2016 increased by 0.2 percentage points and reached 14.3 percent. Betam’s forecasting model predicts the seasonally adjusted December 2016 nonagricultural unemployment will increase by 0.1 points and reach 14.4 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 increase in the period of January 2017.

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



Source: Turkstat, Betam

**Employment losses in industry**

According to seasonally adjusted sectoral labor market data, the number of people employed in services showed a limited increase by 4 thousand whereas the number of people employed industry and construction declined by 51 thousand and 28 thousand, respectively (Figure 3, Table 2).[[6]](#footnote-6) Even though there is an increase in the industry sector employment in the period of November, we observe a strong decrease during December. Employment in construction moves similarly. On the other hand, there is a weak employment increase in services compared to the previous period.

Figure 3 Employment by sectors (in thousands)



Source: Turkstat, Betam

**Increase in year-on-year non-agricultural employment slows down**

From December 2015 to December 2016 the nonagricultural labor force increased by 996 thousand (4.1 percent) and nonagricultural employment increased by 307 thousand (1.4 percent) (Figure 4). Thus, the number of non-agricultural unemployed increased by 689 thousand (22.1 percent) in the period of December 2016. The increase in non-agricultural labor force declined to 307 thousand whereas the increase non-agricultural labor force remains around 1 million level. Thus the increase in non-agricultural unemployment reached 700 thousand.

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



Source: Turkstat, Betam

Female unemployment continues to grow

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 December 2016, nonagricultural female labor force and nonagricultural male labor force increased by 489 thousand and 492 thousand respectively compared to December 2016. On the other hand, nonagricultural female employment increased by 160 thousand whereas the increase in nonagricultural female employment was limited to 148 thousand. The number of non-agricultural unemployed women and men increased by 329 thousand and 344 thousand, respectively. Compared to December 2015, the non-agricultural male unemployment rate grew from 11.1 percent to 12.7 percent and the non-agricultural female unemployment rate rose from 16.8 percent to 20.1 percent

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Labor force** | **Employment** | **Unemployment** | **Unemployment rate** | **Monthly changes** | | |
| **November-13** | 22003 | 19583 | 2420 | 11.0% | **Labor force** | **Employment** | **Unemployment** |
| **December-13** | 22257 | 19831 | 2426 | 10.9% | 254 | 248 | 6 |
| **January-14** | 22530 | 20007 | 2523 | 11.2% | 273 | 176 | 97 |
| **February-14** | 22812 | 20257 | 2555 | 11.2% | 282 | 250 | 32 |
| **March-14** | 22957 | 20363 | 2594 | 11.3% | 145 | 106 | 39 |
| **April-14** | 23017 | 20393 | 2624 | 11.4% | 60 | 30 | 30 |
| **May-14** | 23077 | 20400 | 2677 | 11.6% | 60 | 7 | 53 |
| **June-14** | 23140 | 20386 | 2754 | 11.9% | 63 | -14 | 77 |
| **July-14** | 23234 | 20353 | 2881 | 12.4% | 94 | -33 | 127 |
| **August-14** | 23345 | 20474 | 2871 | 12.3% | 111 | 121 | -10 |
| **September-14** | 23529 | 20564 | 2965 | 12.6% | 183 | 90 | 93 |
| **October-14** | 23690 | 20729 | 2961 | 12.5% | 162 | 165 | -3 |
| **November-14** | 23695 | 20709 | 2986 | 12.6% | 4 | -20 | 24 |
| **December-14** | 23738 | 20771 | 2967 | 12.5% | 44 | 62 | -18 |
| **January-15** | 23833 | 20878 | 2955 | 12.4% | 95 | 107 | -12 |
| **February-15** | 23934 | 20966 | 2968 | 12.4% | 100 | 88 | 12 |
| **March-15** | 23841 | 20885 | 2956 | 12.4% | -92 | -81 | -11 |
| **April-15** | 23900 | 20984 | 2916 | 12.2% | 58 | 99 | -41 |
| **May-15** | 24079 | 21093 | 2986 | 12.4% | 179 | 109 | 70 |
| **June-15** | 24126 | 21110 | 3016 | 12.5% | 47 | 17 | 30 |
| **July-15** | 24196 | 21220 | 2976 | 12.3% | 70 | 110 | -40 |
| **August-15** | 24145 | 21175 | 2970 | 12.3% | -51 | -45 | -6 |
| **September-15** | 24369 | 21372 | 2997 | 12.3% | 225 | 197 | 28 |
| **October-15** | 24470 | 21436 | 3034 | 12.4% | 101 | 64 | 37 |
| **November-15** | 24587 | 21563 | 3024 | 12.3% | 117 | 127 | -10 |
| **December-15** | 24606 | 21604 | 3002 | 12.2% | 19 | 41 | -22 |
| **January-16** | 24676 | 21690 | 2986 | 12.1% | 70 | 86 | -16 |
| **February-16** | 24675 | 21714 | 2961 | 12.0% | -1 | 24 | -25 |
| **March-16** | 24808 | 21881 | 2927 | 11.8% | 133 | 167 | -34 |
| **April-16** | 24950 | 22006 | 2944 | 11.8% | 142 | 125 | 17 |
| **May-16** | 25114 | 22025 | 3089 | 12.3% | 164 | 19 | 145 |
| **June-16** | 25146 | 21877 | 3269 | 13.0% | 32 | -148 | 180 |
| **July-16** | 25161 | 21815 | 3346 | 13.3% | 15 | -62 | 77 |
| **August-16** | 25213 | 21784 | 3429 | 13.6% | 51 | -31 | 82 |
| **September-16** | 25371 | 21946 | 3425 | 13.5% | 158 | 162 | -4 |
| **October-16** | 25532 | 21983 | 3549 | 13.9% | 161 | 37 | 124 |
| **November-16** | 25665 | 22046 | 3619 | 14.1% | 133 | 63 | 70 |
| **December-16** | 25637 | 21971 | 3666 | 14.3% | -28 | -75 | 47 |

Source: Turkstat, Betam

Table 2 Seasonally adjusted employment by sectors (in thousands)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Agriculture** | **Manufacturing** | **Construction** | **Service** | **Monthly changes** | | | |
| **November-13** | 5136 | 5090 | 1858 | 12644 | **Agriculture** | **Manufacturing** | **Construction** | **Service** |
| **December-13** | 5098 | 5064 | 1792 | 12728 | -38 | -26 | -66 | 84 |
| **January-14** | 5053 | 5131 | 1895 | 12805 | -45 | 67 | 103 | 77 |
| **February-14** | 5385 | 5232 | 1935 | 12840 | 332 | 101 | 40 | 35 |
| **March-14** | 5570 | 5359 | 2014 | 12884 | 185 | 127 | 79 | 44 |
| **April-14** | 5602 | 5365 | 1958 | 13039 | 32 | 6 | -56 | 155 |
| **May-14** | 5566 | 5373 | 1896 | 13124 | -36 | 8 | -62 | 85 |
| **June-14** | 5568 | 5364 | 1870 | 13165 | 2 | -9 | -26 | 41 |
| **July-14** | 5486 | 5332 | 1827 | 13227 | -82 | -32 | -43 | 62 |
| **August-14** | 5398 | 5243 | 1814 | 13296 | -88 | -89 | -13 | 69 |
| **September-14** | 5334 | 5257 | 1856 | 13362 | -64 | 14 | 42 | 66 |
| **October-14** | 5332 | 5306 | 1872 | 13386 | -2 | 49 | 16 | 24 |
| **November-14** | 5375 | 5353 | 1903 | 13474 | 43 | 47 | 31 | 88 |
| **December-14** | 5405 | 5273 | 1935 | 13501 | 30 | -80 | 32 | 27 |
| **January-15** | 5426 | 5266 | 1938 | 13567 | 21 | -7 | 3 | 66 |
| **February-15** | 5441 | 5349 | 1928 | 13601 | 15 | 83 | -10 | 34 |
| **March-15** | 5308 | 5351 | 1878 | 13737 | -133 | 2 | -50 | 136 |
| **April-15** | 5476 | 5308 | 1921 | 13656 | 168 | -43 | 43 | -81 |
| **May-15** | 5496 | 5326 | 1900 | 13758 | 20 | 18 | -21 | 102 |
| **June-15** | 5520 | 5404 | 1867 | 13822 | 24 | 78 | -33 | 64 |
| **July-15** | 5547 | 5380 | 1854 | 13876 | 27 | -24 | -13 | 54 |
| **August-15** | 5498 | 5336 | 1909 | 13976 | -49 | -44 | 55 | 100 |
| **September-15** | 5523 | 5252 | 1918 | 14005 | 25 | -84 | 9 | 29 |
| **October-15** | 5523 | 5327 | 1934 | 14111 | 0 | 75 | 16 | 106 |
| **November-15** | 5448 | 5363 | 1951 | 14122 | -75 | 36 | 17 | 11 |
| **December-15** | 5388 | 5353 | 1981 | 14229 | -60 | -10 | 30 | 107 |
| **January-16** | 5419 | 5311 | 1994 | 14299 | 31 | -42 | 13 | 70 |
| **February-16** | 5409 | 5300 | 2007 | 14384 | -10 | -11 | 13 | 85 |
| **March-16** | 5401 | 5276 | 2022 | 14416 | -8 | -24 | 15 | 32 |
| **April-16** | 5375 | 5295 | 2058 | 14528 | -26 | 19 | 36 | 112 |
| **May-16** | 5339 | 5381 | 2060 | 14565 | -36 | 86 | 2 | 37 |
| **June-16** | 5292 | 5386 | 2042 | 14598 | -47 | 5 | -18 | 33 |
| **July-16** | 5132 | 5330 | 1934 | 14612 | -160 | -56 | -108 | 14 |
| **August-16** | 5207 | 5254 | 1934 | 14628 | 75 | -76 | 0 | 16 |
| **September-16** | 5259 | 5224 | 1923 | 14637 | 52 | -30 | -11 | 9 |
| **October-16** | 5351 | 5260 | 2018 | 14668 | 92 | 36 | 95 | 31 |
| **November-16** | 5284 | 5282 | 1975 | 14726 | -67 | 22 | -43 | 58 |
| **December-16** | 5291 | 5316 | 1983 | 14747 | 7 | 34 | 8 | 21 |

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. 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)