

**Arent Fox** 

### BY EDIS & HAND DELIVERY

November 9, 2017

Ms. Lisa R. Barton Secretary to the Commission U.S. International Trade Commission 500 E Street, S.W. Washington, DC 20436

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Inv. Nos. 701-TA-573-574, 731-TA-1349-1358 (Final)

### NON-CONFIDENTIAL VERSION

Confidential Business Information appears at Pages 2-8, 15-19, 22-24, 29-30, and in Exhibits 3, 4, 6 & 11.

Re: Carbon and Certain Alloy Steel Wire Rod from Belarus, Italy, Korea, Russia, South Africa, Spain, Turkey, Ukraine, United Arab Emirates, and the United Kingdom, Inv. Inv. Nos. 701-TA-573-574 & 731-TA-1349-1358 (Final); Turkish Exporters' & Producers' **Pre-Hearing Brief** 

Dear Ms. Barton:

On behalf of the Turkish Steel Exporter's Association (Celik Ihracatcilari Birigli, or "CIB"), its Members, and Icdas Celik Tersane ve Ulasim Sanayi A.S. ("Icdas") ("Turkish Exporters and Producers"), and in accordance with 19 C.F.R. § 207.23, we hereby submit the confidential version of our Pre-Hearing Brief in the above-referenced proceedings.

Pursuant to 19 C.F.R. § 201.6, we respectfully request that certain information contained in this submission, identified by brackets, be accorded proprietary treatment. The disclosure of such business proprietary information as described below is likely to have the effect of either: (1) Arent Fox

Ms. Lisa R. Barton, Secretary
November 9, 2017

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impairing the Commission's ability to obtain such information as is necessary to perform its

statutory functions; or (2) causing substantial harm to the competitive position of the person,

firm, partnership, corporation, or other entity from which the information was obtained. This

information relates to production, capacity, sales, pricing, shipments, financial data, conditions

of competition related to the U.S. domestic producers and to the respondents in this proceeding.

Substantially identical information is not available to the public, and unauthorized disclosure of

this information could cause substantial harm to the business operations and competitive position

of Turkish Exporters and Producers.

Copies of this document have been served on all interested parties as set forth in the

attached Certificate of Service. An attorney certification pursuant to 19 C.F.R. § 207.3(a) and 19

C.F.R. §201.6(b)(3)(iii) is attached to this submission.

If you have any questions or require any additional information, please do not hesitate to

contact the undersigned.

Sincerely,

/s/ Matthew M. Nolan

Matthew M. Nolan Nancy A. Noonan

Andrew Jaxa-Debicki

Counsel for Turkish Steel Exporter's Association (Celik Ihracatcilari Birigli, or "CIB"), its

Members, and Icdas Celik Tersane ve Ulasim

Sanayi A.S.

### CERTIFICATION

CITY OF WASHINGTON	)	
	)	· SS
DISTRICT OF COLUMBIA	)	

In accordance with section 201.6(b)(3)(iii) of the rules of the U.S. International Trade Commission (the "Commission") (19 C.F.R. § 201.6(b)(3)(iii)), I, Matthew M. Nolan, of Arent Fox LLP, counsel to Turkish Steel Exporter's Association (Celik Ihracatcilari Birigli, or "CIB"), its Members, and Icdas Celik Tersane ve Ulasim Sanayi A.S., hereby certify that I have read the foregoing submission in the above referenced proceeding and that the information contained in the attached submission is accurate and complete to the best of my knowledge. Further, I certify pursuant to 19 C.F.R. § 201.6(b)(3)(iii), that the confidential information contained in this submission is not available to the public in substantially identical form.

Dated: November 9, 2017

Matthew M. Nolan

Arent Fox LLP 1717 K Street, NW Washington, DC 20006

District of Columbia, ss:

Subscribed and sworn to before me this 9th day of November, 2017.

Notary Public

My Commission Expires: May 31, 202

### CERTIFICATION

CITY OF WASHINGTON	)	
	)	SS:
DISTRICT OF COLUMBIA	)	

In accordance with section 201.6(b)(3)(iii) of the rules of the U.S. International Trade Commission (the "Commission") (19 C.F.R. § 201.6(b)(3)(iii)), I, Nancy A. Noonan, of Arent Fox LLP, counsel to Turkish Steel Exporter's Association (Celik Ihracatcilari Birigli, or "CIB"), its Members, and Icdas Celik Tersane ve Ulasim Sanayi A.S., hereby certify that I have read the foregoing submission in the above referenced proceeding and that the information contained in the attached submission is accurate and complete to the best of my knowledge. Further, I certify pursuant to 19 C.F.R. § 201.6(b)(3)(iii), that the confidential information contained in this submission is not available to the public in substantially identical form.

Dated: November 9, 2017

Nancy A. Noonan

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District of Columbia, ss:

Subscribed and sworn to before me this 9th day of November, 2017.

Notary Public

My Commission Expires: May 31, 202



### CERTIFICATION

CITY OF WASHINGTON	)	
	)	SS
DISTRICT OF COLUMBIA	)	

In accordance with section 201.6(b)(3)(iii) of the rules of the U.S. International Trade Commission (the "Commission") (19 C.F.R. § 201.6(b)(3)(iii)), I, Andrew Jaxa-Debicki, of Arent Fox LLP, counsel to Turkish Steel Exporter's Association (Celik Ihracatcilari Birigli, or "CIB"), its Members, and Icdas Celik Tersane ve Ulasim Sanayi A.S., hereby certify that I have read the foregoing submission in the above referenced proceeding and that the information contained in the attached submission is accurate and complete to the best of my knowledge. Further, I certify pursuant to 19 C.F.R. § 201.6(b)(3)(iii), that the confidential information contained in this submission is not available to the public in substantially identical form.

Dated: November 9, 2017

Andrew Jaxa-Debicki

Arent Fox LLP 1717 K Street, NW Washington, DC 20006

District of Columbia, ss:

Subscribed and sworn to before me this 9th day of November, 2017.

Notary Public

My Commission Expires: May 31, 202,

### PUBLIC CERTIFICATE OF SERVICE

<u>Carbon and Certain Alloy Steel Wire Rod from Belarus, Italy, Korea, Russia, South Africa, Spain, Turkey, Ukraine, United Arab Emirates, and the United Kingdom:</u>
<u>Inv. Nos. 701-TA-573-574 & 731-TA-1349-1358 (F)</u>

I, Mary T. LaBounty, hereby certify that I caused a copy of the attached to be served on the parties listed below, by hand delivery or first class mail, this 13th day of November, 2017:

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/s/ Mary T. LaBounty
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# BEFORE THE UNITED STATES INTERNATIONAL TRADE COMMISSION WASHINGTON, D.C.

Carbon and Certain Steel Wire Rod From )
Belarus, Italy, Korea, Russia, South Africa, )
Spain, Turkey, Ukraine, the United Arab )
Emirates and The United Kingdom. )

### NON-CONFIDENTIAL VERSION

Inv. Nos. 701-TA-573-574 and 731-TA-1349-1358 (Final)

Business Proprietary Information Deleted from Pages: 2-8, 15-19, 22-24, 29, and 30; and from Exhibits 3, 4, 6 & 11.

# PREHEARING BRIEF OF THE TURKISH EXPORTERS AND PRODUCERS

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November 9, 2017

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### I. INTRODUCTION

On behalf of the Turkish Steel Exporters Association and Icdas Celik Enerji Tersane ve Ulasim Sanayi A.S. ("Turkish Exporters and Producers"), and in accordance with 19 C.F.R. § 207.23, and the scheduling notice published in the *Federal Register* on September 20, 2017, we hereby submit this pre-hearing brief in the final phase investigation on *Carbon and Certain Alloy Steel Wire Rod From Belarus, Italy, Korea, Russia, South Africa, Spain, Turkey, Ukraine, United Arab Emirates, and United Kingdom*, Inv. Nos. 701-TA-573-574 and 731-TA-1349-1358 (Final).

As set forth below, the U.S. International Trade Commission ("Commission") should find that there is no material injury or threat of such injury to the U.S. wire rod industry by reason of subject imports. The data compiled by the Commission in the Pre-Hearing Staff Report<sup>2</sup> show that the domestic industry, which is highly integrated and in many ways insulated from competition by imports, did not lose significant market share during the period of investigation ("POI") and performed at levels that do not support a finding of injury. Factors that serve to insulate the domestic industry from import competition include upstream and downstream integration, "Buy American" restrictions, greater ability and flexibility in satisfying customer preferences and logistical advantages due to transportation barriers to imports. These advantages are reflected in steady capacity utilization rates and other positive performance indicators, particularly when internal transfers to affiliated downstream wire producers and fabrication operations are taken into account.

<sup>1</sup> 

<sup>&</sup>lt;sup>1</sup> Wire Rod From Belarus, Italy, Korea, Russia, South Africa, Spain, Turkey, Ukraine, the United Arab Emirates, and the United Kingdom; Scheduling of the Final Phase of Countervailing Duty and Antidumping Duty Investigations, 82 Fed. Reg. 44001 (Sept. 20, 2017).

<sup>&</sup>lt;sup>2</sup> Prehearing Staff Report (Nov. 2, 2017) ("Staff Report.").

More important, any declines in U.S. industry volume and market share over the POI are the result of reductions in U.S. production of wire rod that are not attributable to imports. When these reductions are properly accounted for, the data show that the U.S. industry's commercial shipments and market share held steady or increased over 2014-2016.

Petitioners' case rests in large part on the volume effects of subject imports, but those volumes did not have a material negative impact on the domestic industry's sales quantities or market share. Declines in sales values may relate primarily to substantial decreases in raw material prices. Lower profits for the industry as a whole may reflect the anomalous cost and expense cirumstances of one or two companies that have an outsized effect on the aggregate data rather than to actual declines in profitability.

Turkish producers maintained [ ] capacity utilization levels throughout the POI. A substantial portion of their production was consumed locally in a growing domestic market.

Turkish exports were spread over a large number of markets, mostly in Europe and the Middle East. Turkish exports to the U.S. rose and then declined substantially over the POI, and recent increases in response to an improving market in interim 2017 have not returned to peak POI levels. Significantly, overselling by imports from Turkey was at its highest level in 2015,<sup>3</sup> the peak volume year in the POI for imports into the U.S. of subject merchandise from Turkey.

Exports of wire rod from Turkey to the U.S. increased in 2015 because China left the market and U.S. producers did not have the capacity to fill orders no longer supplied by Chinese producers. U.S. purchasers turned to Turkish and other subject imports for alternative sources of supply. As the market adjusted to China's departure and stabilized, Turkish exports declined in 2016.

-2-

<sup>&</sup>lt;sup>3</sup> Staff Report at V-11 (Table V-4).

The record shows that the totality of factors considered by the Commission in determining whether there is injury or threat of injury to a domestic industry by reason of subject imports does not support affirmative findings in these investigations.

### II. CONDITIONS OF COMPETITION

The statute directs the Commission to evaluate economic factors "within the context of the business cycle and conditions of competition that are distinctive to the affected industry." 19 U.S.C. § 1677(7)(C). As it has previously, the Commission will find that the U.S. industry is dominated by a few large U.S. producers.<sup>4</sup> This level of dominance is largely the result of the high level of vertical integration that characterizes the industry and effectively insulates most of their wire rod operations from import competition.

# A. The Dominant Players In The U.S. Market Are Vertically Integrated And Shielded From Imports

The U.S. wire rod market is dominated by a small number of "leading" producers, including petitioners Nucor Corporation ("Nucor"), Gerdau Ameristeel US Inc. ("Gerdau"), Charter Steel ("Charter"), Keystone Consolidated Industries, Inc ("Keystone") and Sterling, which [ ] the petition.<sup>5</sup> In 2016, these five companies accounted for nearly [ ] of reported U.S. capacity,<sup>6</sup> [ ]% of production,<sup>7</sup> and [ ] by value of net sales.<sup>8</sup>

The wire rod operations of the five leading companies are part of larger steel conglomerates, and all have related downstream wire production operations. Internal consumption and transfers to related firms represent a significant portion of their business. For example, in 2016 the combined volume of internal consumption and transfers to related firms as

<sup>&</sup>lt;sup>4</sup> Carbon & Certain Alloy Steel Wire Rod From China, Inv. Nos. 701-TA-512 & 731-TA-1248, USITC Pub. 4509 (Jan. 2015) (final) ("Wire Rod from China Final").

<sup>&</sup>lt;sup>5</sup> See Staff Report at III-2 (Table III-1).

<sup>&</sup>lt;sup>6</sup> *Id.* at III-5 (Table III-3).

<sup>7</sup> Id.

<sup>&</sup>lt;sup>8</sup> Derived from Staff Report at Table F-1, at 1.

<sup>&</sup>lt;sup>9</sup> Staff Report at III-2 (Table III-1, notes) and at III-11 n.6.

a percentage of total production figures for [ ] were, respectively, [ ]. 10 For the U.S. industry as a whole, in any given year of the POI internal consumption accounted for between [ ] of total U.S. shipments, and transfers to related firms represented between [ ] of total U.S. shipments. 11 The combined volume of internal consumption and transfers to related firms in 2016 represented [ ]% of U.S. producers' total shipments. 12 In addition, Nucor and Gerdau dominate both the scrap supply-side of the market and the downstream demand-side of the market. Market dominance by a small group of vertically integrated domestic producers that are insulated from competition is a fundamental condition of competition that must be factored into the Commission's consideration of whether there is injury or threat of injury by reason of subject imports. 13

Vertical integration *via* upstream scrap operations affords U.S. producers more secure sources of high quality scrap supply, as well as lower raw material costs through internal transfers of material to their wire rod operations. They can also defer some costs by selling excess lower quality scrap on the open market. Turkish producers have no such luxury – they must purchase scrap on the open market at whatever price it is offered.

U.S. producers' downstream wire production and fabrication operations are an even more important consideration in assessing the U.S. industry and conditions restricting foreign competition. Petitioners' wire rod mills are used to feed their downstream wire operations, which then compete with other independent wire producers who must purchase wire rod from

].

<sup>&</sup>lt;sup>10</sup> See U.S. Producer Responses of [

<sup>&</sup>lt;sup>11</sup> Staff Report at III-10.

<sup>&</sup>lt;sup>12</sup> *Id.* at III-9, Table III-5.

<sup>&</sup>lt;sup>13</sup> The Commission has considered these conditions in other cases. *See. e.g., Steel Concrete Reinforcing Bar from Mexico and Turkey*, Inv. Nos. 701-TA-502 and 731-TA-1227, USITC Pub. 4496 (Oct. 2014) (final) ("2014 Rebar Final Determination"); *Steel Concrete Reinforcing Bar from Belarus, China, Indonesia, Latvia, Moldova, Poland, and Ukraine*, Inv. Nos.731-TA-873-875, 878-880, and 882, USITC Pub. 4409 (July 2013) (2d review) (the "2013 Rebar Sunset").

Petitioners, or import. 14 The Commission has the benefit of detailed information regarding these integrated downstream operations from the China wire rod case completed in late 2014.<sup>15</sup> As will be discussed below, the degree of consolidation has only increased with Nucor's opening of a 300,000 ton annual capacity modern wire rod mill in Darlington, South Carolina.

U.S. producers compete with each other, and have a distinct preference for selling wire rod to their downstream fabrication units, which provide higher value added services and capture greater revenue. Turkish and other subject imports do not have downstream fabrication operations in the United States, and do not ship fabricated wire products to the United States. This condition of competition greatly favors U.S. producers who use their downstream operations to support their wire rod mills and to insulate those mills from import competition.

Downstream fabrication operations also permit U.S. producers to extract profits from both wire rod operations and downstream fabrication operations, or to shift profits among businesses. Aggregate data for the industry on average unit values ("AUVs") for commercial shipments relative to those for transfers to related firms indicate [

1:16

Year	<b>AUV Commercial</b>	<b>AUV Related Transfers</b>	Diff	erence
2014	715 ST	[ ] ST	[	]
2015	583 ST	[ ] ST	[	]
2016	529 ST	[ ]ST	ſ	]

The data suggest that downstream operations are receiving [

commercial sales prices, with significant effects on overall sales values and

<sup>&</sup>lt;sup>14</sup> See, e.g., Preliminary Conference Transcript, at 21-44 (Apr. 18, 2017) (Testimony of the American Wire Producers Association ("AWPA") witnesses) ("Prelim. Tr.").

<sup>&</sup>lt;sup>15</sup> Staff Report at V-11 (Table V-4).

<sup>&</sup>lt;sup>16</sup> Figures in table are derived from Staff Report at III-9 (Table, III-5).

profitability. As stated in the Staff Report, "{t} he quantity of U.S.producers' internal consumption increased by [ ] percent from 2014 to 2016, whereas its unit values decreased by [ ] percent" over the POI. Transfers to related firms exhibited the same trends, with the quantity increasing by [ ]% over the POI and unit values decreasing by [ ]%. The industry trend toward vertical integration has strengthened those producers who have adopted this strategy, while causing unease among independent wire producers and fabricators who are at a competitive disadvantage vis à vis the integrated mills. 19

# B. U.S. Demand For Wire Rod Was Stable During The POI And Is Now Growing

Data on the record of this invesigation indicates that total market apparent U.S. consumption based on quantity decreased by a modest 2.3% from 2014 to 2016, but that it has more recently increased, rising by 6.7% during the first three quarters of 2017 as compared with the same period in 2016.<sup>20</sup>

Demand for wire rod, which is an intermediate product used in downstream products, must be broken down into several components. There are several different markets for wire rod, including the automotive, industrial, agricultural and construction industries.<sup>21</sup> These markets require wire rod with different chemistries, manufacturing processes and grades. Wire rod is not a generic commodity product. Demand for wire rod fluctuates among and within these user sectors, and accurate analysis of the U.S. wire rod industry and market requires taking account of these variations.

<sup>&</sup>lt;sup>17</sup> *Id.* at III-8.

<sup>18</sup> Id

<sup>&</sup>lt;sup>19</sup> See Prelim. Tr. at 21-44 (Testimony of AWPA witnesses).

<sup>&</sup>lt;sup>20</sup> Staff Report at IV-24.

<sup>&</sup>lt;sup>21</sup> *Id.* at II-1.

Conditions in the U.S.market for wire rod were essentially stable during the POI, but with the overall U.S. economy continuing to show signs of stronger growth<sup>22</sup> it appears that projections the industry will experience growth rates between five and six percent in 2017<sup>23</sup> are likely to be realized. There are also indications that the U.S. industry has been able to pass through price increases: [

1<sup>24</sup> Per

ton average prices for industrial quality wire rod have [ ] since the beginning of 2017 while those for cold heading wire rod [ ] during the same period.<sup>25</sup> The market is clearly improving, and U.S. producers are benefiting from increased demand and higher prices.

As demand improves, domestic mills will continue to adhere to their preference for supplying their internal downstream wire production and fabrication units. Independent buyers will be left to pay higher domestic prices, assuming material is even available from domestic sources on a timely basis. Their only alternative source of supply will be imports, which are needed to maintain the overall health of the U.S. industry.

# C. A Large Portion Of the Domestic Wire Rod Market Is Shielded from Competition With Subject Imports

Imports have always been a necessary part of the U.S. market because domestic producers have never had the capacity to meet total demand. As the Commission concluded in a

<sup>&</sup>lt;sup>22</sup> See Bureau of Economic Analysis, Gross Domestic Product: Third Quarter 2017 (Advance Estimate), Oct. 27, 2017 and Gross Domestic Product: Second Quarter 2017 (Third Estimate), Corporate Profits: Second Quarter 2017 (Revised Estimate), Sept. 27, 2017, attached at Exhibit 1.

<sup>&</sup>lt;sup>23</sup> See, e.g. Kermit Baker, Even with uncertainties looming, healthy gains projected for 2017 building activity, AIA (Jan. 25, 2017), attached at **Exhibit 2**.

<sup>&</sup>lt;sup>24</sup> Nat Rudarakanchana, *Domestic wire rod prices rise with scrap*, American Metal Market (Mar. 23, 2017), attached as **Exhibit 3**.

<sup>&</sup>lt;sup>25</sup> American Metal Market, *Past Monthly Averages for Scrap & Wire Rod, Jan. 2014 - Sept. 2017* (Oct. 30, 2017) ("*AMM pricing data*"), attached at **Exhibit 4**.

2003 study of the effectiveness of import relief measures, imports of wire rod in 2002 were much higher than they are today, topping out at 3.3 million short tons.<sup>26</sup> U.S. production at the time was around 2 million tons.<sup>27</sup> U.S. production has increased significantly since then, and imports have fallen. These figures provide perspective and serve to demonstrate that current imports at lower levels are not injuring or threatening to injure the U.S. wire rod industry.

The domestic industry's market share remained relatively constant over the POI, and U.S. producer shipments declined by only [ ]. 28 Imports' share of apparent consumption was also relatively [ ] during the period. 29 Integrated operations are an important reason why domestic producers' were able to maintain their production and market share levels. Another reason is that a significant portion of U.S. producers' shipments are sold either directly or indirectly to downstream wire producers under the Buy America and Buy American preference programs. 30

### 1. Domestic Supply Preference

As noted, a significant part of the domestic market is reserved to the U.S. industry through domestic preference programs.<sup>31</sup> A majority of U.S. purchasers responding to the Commission's questionnares reported that domestic product was required by law for anywhere from 2 to 68 percent of their purchases.<sup>32</sup> Buy America provisions provide considerable price incentives to use domestic steel in federal and state infrastructure projects. For example, under

<sup>&</sup>lt;sup>26</sup> Certain Steel Wire Rod: Evaluation of Effectiveness of Import Relief, Inv.TA-204-11, USITC Pub. 3629, at II-4 (Table II-3) (Aug. 2003) ("Wire Rod Evaluation").

<sup>&</sup>lt;sup>27</sup> *Id.* at II-8 (Table II-5).

<sup>&</sup>lt;sup>28</sup> Staff Report at IV-27 (Table IV-13).

<sup>&</sup>lt;sup>29</sup> Id

<sup>&</sup>lt;sup>30</sup> See Prelim. Tr. at 27-30 (Testimony of C. Stauffer, Insteel Industries).

<sup>&</sup>lt;sup>31</sup> Buy America provisions appear in a variety of federal and state procurement laws. A survey of these laws was conducted by the Congressional Research Service ("CRS"). *See* J. Luckey, CRS, *Domestic Content Legislation: The Buy American Act and Complementary Little Buy American Provisions* (Apr. 25, 2013) (the "CRS Study"), available at http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1917&context=key\_workplace.

<sup>32</sup> Staff Report at II-16.

U.S. Department of Transportation ("DOT") procurement rules, the DOT is required to use domestically produced materials in projects unless the material is either not available or the cost of using domestic material would result in an increase in the cost of a project of over 25%.<sup>33</sup> This clearly gives U.S. steel producers a significant price premium advantage over imports in federally funded projects.

Beyond Buy America, there is a strong continuing preference among many purchasers for domestic sources of wire rod. Domestic producers are located throughout the U.S. market,<sup>34</sup> have shorter lead times and are much better positioned to respond flexibly to changing customer requirements than imports. Satisfying the requirements of purchasers who maintain "just-in-time" inventories requires a logistics network in the U.S. market that subject imports simply do not have. Large differentials in lead times are heavily in favor of U.S. producers.<sup>35</sup> Wire rod is primarily "produced-to-order," and lead times for U.S. producers' commercial shipments produced to order average 28 days, while those for imports average 101 days.<sup>36</sup> Imports from Turkey and other subject imports are at a substantial logistical disadvantage due to long lead times.

Importers also incur the additional costs of getting material from the dock, in Houston or Tampa for example, to potential customers farther inland. While Turkish and other foreign producers have a logistical advantage in that ocean freight rates are much lower than U.S. inland freight rates, that advantage evaporates after the cargo reaches the U.S. port. Any U.S. inland transportation of wire rod costs the same for all. U.S. overland freight rates are generally high for heavy steel products. Barge traffic is subject to the Jones Act, which mandates the use of

<sup>&</sup>lt;sup>33</sup> See 49 U.S.C. § 24405(a)(2)(D) and CRS Study.

<sup>&</sup>lt;sup>34</sup> All of the major wire rod producers have a coast-to-coast footprint that allows them to service clients locally.

<sup>&</sup>lt;sup>35</sup> Staff Report at II-12.

<sup>&</sup>lt;sup>36</sup> *Id*.

U.S. flagged and crewed vessels involving coastwise trade.<sup>37</sup> Competition from imports naturally becomes more attenuated as the product moves inland. Several U.S. mills and their downstream fabrication units are located inland close to their main markets,<sup>38</sup> meaning their product travels less distance to get to the customer. Shorter distances translate into lower transportation and delivery costs for those U.S. mills relative to imports, which must be transported from the coast and incur added freight. What matters to the customer is the delivered price; not the FOB price. As a consequence, domestic mills located closer to the U.S. customers in certain regions enjoy significant logistical cost advantages over imports.

Most foreign producers and exporters to the U.S. of wire rod have no U.S. production facilities and very limited, if any, access to affiliated downstream production operations. They are effectively excluded from a significant segment of the market by domestic preference programs such as Buy America. They are at a distinct disadvantage in terms of lead times. In the specific case of Turkey, a majority of U.S purchasers rated U.S. producers superior to Turkish producers in categories such as availability, delivery terms, delivery time, reliability of supply and U.S. transportation costs.<sup>39</sup> In short, the conditions of competition are heavily stacked in favor of U.S. producers of wire rod.

### III. LIKE PRODUCT AND DOMESTIC INDUSTRY

The Turkish Exporters and Producers defer to and join in the briefs being filed by other respondents regarding the issue of like product.

<sup>&</sup>lt;sup>37</sup> See e.g., Maritime Law Center, *The Jones Act*, available at http://www.maritimelawcenter.com/html/the jones act.html.

<sup>&</sup>lt;sup>38</sup> See e.g., Nucor and Gerdau location maps on their websites and annual reports.

<sup>&</sup>lt;sup>39</sup> Staff Report at II-19 (Table II-8).

# IV. THERE IS NO REASONABLE INDICATION OF MATERIAL INJURY BY REASON OF SUBJECT IMPORTS

### A. Legal Standard for Material Injury

During the final phase of the investigation, the Commission must determine whether the domestic industry has been materially injured by reason of subject imports. 40 Material injury is defined as "harm which is not inconsequential, immaterial, or unimportant." In determining whether the domestic industry has been materially injured, the statute requires that the Commission consider:

- (1) the volume of imports of the subject merchandise,
- (2) the effect of imports of that merchandise on prices in the United States for domestic like products, and
- (3) the impact of imports of such merchandise on domestic producers of domestic like products, but only in the context of production operations within the United States; and
- (4) may consider such other economic factors as are relevant to the determination regarding whether there is material injury by reason of imports.<sup>42</sup>

With respect to volume, "the Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."<sup>43</sup> The price effect of any imports is measured by both the presence of significant underselling and price depression or suppression due to subject imports.<sup>44</sup> Lastly, the impact of subject imports is evaluated in terms of how subject imports have affected "all relevant economic factors which have a bearing on the state of

<sup>&</sup>lt;sup>40</sup> 19 U.S.C. §§ 1671d(b), 1673d(b).

<sup>&</sup>lt;sup>41</sup> 19 U.S.C. § 1677(7)(A).

<sup>&</sup>lt;sup>42</sup> 19 U.S.C. § 1677(7)(B)(i)(I) – (III) and § 1677(7)(B)(ii).

<sup>&</sup>lt;sup>43</sup> 19 U.S.C. § 1677(7)(C)(i).

<sup>&</sup>lt;sup>44</sup> 19 U.S.C. § 1677(7)(C)(ii).

the industry in the United States."<sup>45</sup> "No single factor is dispositive, and all relevant factors are considered 'within the context of the business cycle and conditions of competition that are distinctive to the affected industry."<sup>46</sup>

The simple fact that the domestic industry has been declining is not sufficient to meet the statutory requirements. Rather, any injury that is suffered by the domestic industry must be "by reason of" subject imports. "This evaluation under the 'by reason of' standard must ensure that subject imports are more than a minimal or tangential cause of injury and that there is a sufficient causal, not merely temporal, nexus between subject imports and material injury."<sup>47</sup>

It is important to note that an increase in subject imports in the market alone is not a sufficient basis to find that material injury exists. In a prior investigations, the Commission made a preliminary negative determination that an industry in the United States is materially injured or threatened with material injury, despite a significant volume increase in subject imports and underselling. <sup>48</sup> The Commission found that the subject imports did not adversely affect the domestic industry because the industry saw substantial improvement in almost all major indicators of industry performance. <sup>49</sup> The Commission determined that the domestic industry was not threatened with material injury due, in part, to the following factors:

- increased profitability in the POI;
- volume and market share increases of subject imports were related to increased demand and had little adverse effect on the U.S. industry;
- recent trends in subject import volumes did not support a finding that imports would increase substantially;

<sup>&</sup>lt;sup>45</sup> 19 U.S.C. § 1677(7)(C)(iii).

<sup>46</sup> Xanthan Gum from Austria and China, Inv. Nos. 731-TA-1202-03, USITC Pub. 4411, at 12 (July 2013) (final).

<sup>&</sup>lt;sup>48</sup> Oil Country Tubular Goods from Austria, Brazil, China, France, Germany, India, Indonesia, Romania, South Africa, Spain, Turkey, Ukraine, and Venezuela, Inv. Nos. 701-TA-428 and 731-TA-992-994 and 996-1005, USITC Pub. 3511, at 1 (May 2002) (prelim.) ("OCTG 2002")

<sup>49</sup> Id. at 26.

- there was "no indication" that the unused capacity or "imminent increases in production capacity" would lead to substantially increased imports, due in part to increasingly high capacity utilization levels of the subject producers and evidence that such production would be directed to home and third-country markets;
- capital expenditures of the domestic industry increased substantially; and
- positive trends in the industry's financial performance despite the increase in subject import volume and only began to weaken when subject imports declined.<sup>50</sup>

Many of the Commission's finding in that case are also compelled by the record before the Commission in the final phase of this investigation and should similarly lead to a finding that the U.S. industry is neither materially injured nor threatened with such injury by reason of the subject imports.

## B. The Volume of Subject Imports Does Not By Itself Indicate Material Injury

The Commission is tasked with determining whether the volume of subject imports, and any increase in that volume during the POI is significant, *both absolutely and relative to production and consumption* in the United States.<sup>51</sup> Thus, while subject imports increased during the POI from approximately 449,609 ST in 2014 to 701,654 ST in 2016, or by about 252,045 ST,<sup>52</sup> this volume increase must be placed in context. Individual sources of subject imports exhibited varying up and down trends.<sup>53</sup> After increasing from 2014 to 2015, imports from Turkey declined by over 60% in 2016.<sup>54</sup> Imports from Turkey during the first three quarters

<sup>&</sup>lt;sup>50</sup> *Id.* at 29-30.

<sup>&</sup>lt;sup>51</sup> 19 U.S.C. § 1677(7)(C)(i).

<sup>&</sup>lt;sup>52</sup> Staff Report at IV-4 (Table IV-2).

<sup>&</sup>lt;sup>53</sup> *Id.* at IV-3.

<sup>&</sup>lt;sup>54</sup> Derived from Staff Report at IV-4 (Table IV-2).

of 2017 rose as compared with the same period in 2016, but on an annualized basis the estimated total volume for 2017 will still be below that for 2014 by nearly 20%.<sup>55</sup>

Increases in both subject and non-subject imports should be viewed in the context of the rapid rise and precipitous fall in volumes of imports from China. In 2013, China shipped nearly 619,000 ST to the U.S. market.<sup>56</sup> Imports from China surged between 2011 and 2013, displacing over 164,000 ST of other imports while also increasing overall import levels.<sup>57</sup> Imports displaced by China during this period included a large volume of subject imports. China was the second largest source of U.S imports of wire rod in 2014,<sup>58</sup> but buyers began moving to other sources as a precaution against the potentially adverse results of antidumping and countervailing duty investigations initiated against China in late 2013. Following the preliminary determination that imposed 106%+ margins,<sup>59</sup> Chinese product virtually disappeared from the market in short order. Imports from China fell to 374,785 ST (40%) in 2014 and to near zero in 2015/2016.<sup>60</sup>

The Chinese departure created a void at the same time that apparent consumption was rising, and both subject and non-subject imports that had been displaced by China returned to the market. Most of the increase in subject imports relates to recovering market previously lost to China, and the total increase in subject imports of 252,045 ST is far less than the well over 600,000 ST of Chinese product that left the U.S. market during 2014-2016 or even the 374,785 ST overhang of Chinese imports in 2014.<sup>61</sup> The balance of significant increases in imports were from non-subject sources, led by Canada whose imports rose over 43,540 ST in 2014.<sup>62</sup>

<sup>&</sup>lt;sup>55</sup> *Id*.

<sup>&</sup>lt;sup>56</sup> Wire Rod From China Final at IV-5 (Table IV-2).

<sup>57</sup> Id

<sup>&</sup>lt;sup>58</sup> Staff Report at IV-4 (Table IV-2).

<sup>&</sup>lt;sup>59</sup> Carbon and Certain Alloy Steel Wire Rod from China, Inv. Nos. 701-TA-512 and 731-TA-1248, USITC Pub. 4458 (Mar. 2014) (prelim.).

<sup>&</sup>lt;sup>60</sup> Staff Report at IV-4 (Table IV-2).

<sup>&</sup>lt;sup>61</sup> *Id* 

<sup>&</sup>lt;sup>62</sup> See id. and Wire Rod From China Final, at IV-6 (Table IV-3).

During the POI, overall import volumes were stable and actually declined slightly from about 1.8 million ST in 2014 to around 1.78 million ST in 2016.<sup>63</sup> While total import volume remained constant, there were changes in the relative shares of imports from different sources as subject imports replaced non-subject imports. In 2014, non-subject imports totaled 1,350,698 ST.<sup>64</sup> By 2016 non-subject imports were 1,070,927 ST, a decline of 279,771 ST that exceeds the amount of increase in subject imports.<sup>65</sup> Some non-subject imports such as those from Canada also increased during the POI. Non-subject imports held a larger share of total import volumes throughout the POI, while subject imports merely replaced some non-subject sources during the POI.

### C. Subject Imports Have Not Had Significant Adverse Price Effects

] as of the end of the third quarter. This correlates quite closely with monthly scrap market prices reported in American Metal Market attached at **Exhibit 4**.<sup>69</sup> Prices for Chicago

<sup>&</sup>lt;sup>63</sup> Staff Report at IV-4 (Table IV-2).

<sup>&</sup>lt;sup>64</sup> *Id*.

<sup>&</sup>lt;sup>65</sup> *Id*.

<sup>&</sup>lt;sup>66</sup> See id. at V-1 – V-3, and AMM pricing data, attached at Exhibit 4.

<sup>&</sup>lt;sup>67</sup> Id. at V-9 (Table V-3), and AMM pricing data, attached at Exhibit 4.

<sup>&</sup>lt;sup>68</sup> *Id*.

<sup>&</sup>lt;sup>69</sup> See Exhibit 4.

No. 1 heavy melt scrap [	] in 2014 and about [	] in 2015 before	
[	] in 2016. Prices have	e fluctuated in 2017	
between a [	] and [	], which is	
[ ] the [		]. The extremely	
close correlation between scrap and	wire rod is demonstrated by the ch	arts and graphs provided	
in Exhibit 4. This is also consistent	with published news reports on an	nounced wire rod price	
changes. These published reports ge	enerally cite to scrap price changes	underlying changes in	
wire rod prices and are widely monitored by sellers and buyers. <sup>70</sup>			

The indexed data in **Exhibit 4** also shows that the gap between scrap and wire rod prices charged by domestic producers actually increased during the course of much of the POI. This widening gap means that leading U.S. producers were able to maintain prices in the face of falling scrap prices for much of the POI, especially during 2015 when subject imports were at their highest levels. Though scrap prices largely determine wire rod prices, U.S. producers were able to exercise market power to maintain prices and even to increase them in 2016 despite the presence of subject imports.<sup>71</sup> These data do not provide any evidence of price depression or suppression due to subject imports.

#### D. **Key Performance Indicators for the Domestic Industry Show That It Has Not Experienced Any Adverse Impact From Subject Imports**

The adjusted data on financial performance reported by the domestic industry does not support their injury case.

First, U.S. producers lost minimal market share. In 2014 domestic producers' U.S. shipments held a 66.9% market share by quantity. In 2016 domestic producers' U.S. shipments

<sup>&</sup>lt;sup>70</sup> See Exhibit 4.

<sup>71</sup> Most purchasers responding to the Commission's questionnaires reported that petitioners Nucor, Keystone and Gerdau are the price leaders, and many reported that Nucor is normally the first to announce price increases or decreases in the market. Staff Report at V-7.

accounted for a 66.7% market share by quantity, a negligible loss.<sup>72</sup> Overall U.S. shipments declined modestly, but so did apparent consumption. Total imports also fell.

Third, the financial performance of the U.S. industry does not support the conclusion that subject imports have had a negative impact on the industry. As noted earlier, raw material costs fell dramatically during the POI. The decline was particularly steep in 2015.<sup>76</sup> Lower scrap costs result in substantial raw material cost savings. On an aggregate industry basis, average unit (ST) raw material costs went from [ ] in 2014 to [ ] in 2016, a [ ], while aggregate unit net sales value [ ] over the same period.<sup>77</sup> Prices fell, but so did the single most important component of costs. Domestic producers benefited from lower costs and were able to maintain prices and increase their margins despite the presence of

<sup>&</sup>lt;sup>72</sup> *Id.* at IV-27 (Table IV-13).

<sup>&</sup>lt;sup>73</sup> Staff Report at III-5 (Table III-3).

<sup>&</sup>lt;sup>74</sup> Wire Rod From China Final at III-6.

<sup>&</sup>lt;sup>75</sup> Staff Report at III-5, Table III-3.

<sup>&</sup>lt;sup>76</sup> See Exhibit 4.

<sup>&</sup>lt;sup>77</sup> Staff Report, Table F-1, at 5.

subject imports. Operating income levels also [ ] in 2016 after [ ] 2015, resulting in higher gross profit to net sales ratios for the industry. Actual profit values declined somewhat, but that was due to lower sales prices triggered by lower scrap costs.

Fourth, industry employment figures did not change significantly during the POI. The number of production and related workers ("PRWs") increased from 2,299 in 2014 to 2,410 in 2015 before falling back to 2,222 in 2016, for a total reduction of 188 PRWs.<sup>79</sup> Hours worked per week remained stable, and wages per hour rose slightly.<sup>80</sup>

The aggregate data mask significant differences among domestic producers. For example, ] in sales volumes during the POI, 81 but also reported the 1.82 This is likely the result of the [ ]. The fact [ ] indicates they anticipate a growing market. It is also appears that [ I took market share away from other U.S. producers like [ ]. [ gross profit margins 1.83also improved [ during the POI to over [ SG&A expense to commercial sales ratios, which are an important indicator of efficiency and have a direct impact on profitability varied widely. 1 ratio of [ ] in 2016 was less than half of that for [ in the same year. The 2016 ratios for [ ] were [ l, respectively. As these figures

demonstrate, aggregate industry figures can smooth out significant differences in performance

<sup>&</sup>lt;sup>78</sup> *Id.*, Table F-1, at 2-3.

<sup>&</sup>lt;sup>79</sup> *Id.* at III-15 (Table III-8).

 $<sup>^{80}</sup>$  *Id* 

<sup>&</sup>lt;sup>81</sup> *Id.*, Table F-1, at 1.

<sup>82</sup> Id. at III-5 (Table III-3).

<sup>&</sup>lt;sup>83</sup> *Id.*, Table F-2, at 3.

among individual firms and may sometimes serve to present an inaccurate picture of the condition of the industry.

### E. The Georgetown Mill Closure Is Not Related to Imports

Petitioners have sought to characterize the closure of the Arcelor mill in Georgetown,

South Carolina as a prime example of the injurious impact of subject imports. The fact is that, of
all the valid reasons that can be given for the closure, import competition is not one of them.

Built in 1969, the Georgetown mill was an aged, outdated facility with high energy and operating
costs. It had a troubled history that included bankruptcy, takeover and plundering by a capital
investment firm, closures due to oil leaks and fires, and a shutdown during the great recession.

The harbor adjacent to the plant is rapidly silting up, and the Army Corps of Engineers has made
it clear that it has no interest in spending the tens of millions it would take to dredge the harbor.

The local municipality is anxious to put the land occupied by the mill to other uses. <sup>84</sup> The final
nail in the coffin was Nucor's construction of a new, modern wire rod mill only 100 miles away
in Darlington, South Carolina. In the end, it was domestic competition, not imports, that finished
off the Georgetown mill.

The closure of Georgetown for reasons that have nothing to do with imports is also significant because it belies some of Petitioners' claims regarding declines in shipments and market share. The cessation of production at Georgetown removed U.S. production that totaled

[ ] ST in 2014 from the U.S. production base. 85 If properly accounted for, the removal of Georgetown from the production base puts the U.S. industry's claims of declines in commercial shipments and market share in a new light. With Geogetown removed from the calculation, the

<sup>&</sup>lt;sup>84</sup> See Articles related to closing of Georgetown Mill, attached at Exhibit 5.

<sup>85</sup> Staff Report at III-14 (Table III-7).

U.S. industry performed well in 2016 and increased market share despite a decline in apparent domestic market consumption.

### F. U.S. Producers Are Raising Prices

Based on a survey of news reports and price announcements, it appears that over the past year and a half U.S. producers have announced price increases and been able to make at least some of them stick:<sup>86</sup>

April 14, 2016: U.S. producers announce \$50 per ton price increase in part due to higher scrap prices. "A U.S. mill withdrew a 'foreign fighter' deal" to a customer.

May 12, 2016: U.S. producers announce \$20-40 per ton price increase based on scrap price increase...

November 28, 2016: U.S. mills announce \$40 per ton price increase reflecting \$30 ton scrap price increase. "December rolling is very full".

December 14, 2016: U.S. producers announce \$45 per ton price or increase raw material surcharge increase based on scrap price increase.

January 12, 2017: U.S. Producers announce \$45 per ton price increase. Based on scrap price increase. "Mill order books are robust."

March 23, 2017: U.S. producers announce \$40 per ton price increase based on scrap price increase. "domestic mills were busy enough to turn back orders by weeks or even a month, . . . lead times have stretched to May for certain sizes.

Based on these articles, the domestic industry has likely raised wire rod prices by well over \$200 per ton as scrap prices have risen and order books have filled. While US producers may not have realized every dollar of these announced increases, they have able to capture a portion of most of those increases. Subject imports were clearly not a deterrent to increasing prices.

### G. Possible Anomalies in Reported U.S. Producer Financial Data

As noted, there appear to be anomalies in some of the U.S. producer financial data that has been reported to the Commission. These are to some extent masked or smoothed out in the

<sup>&</sup>lt;sup>86</sup> See Exhibit 6, attaching Articles from American Metal Market related to Wire Rod Pricing & Sales, 2015-2017.

aggregate data. Petitioners enjoy a number of advantages by virtue of being vertically integrated. One of those is the ability to allocate costs in many different ways over many different operations and products. Consequently, we believe it is important that the Commission to examine the data carefully to assure that the data on the record is an accurate reflection of the U.S. industry's actual costs, performance and profitability.

# V. IMPORTS FROM TURKEY SHOULD NOT BE CUMULATED WITH SUBJECT IMPORTS FROM OTHER COUNTRIES FOR PURPOSES OF THE COMMISSION'S THREAT DETERMINATION

In determining whether to cumulate imports for the purposes of determining whether there is a threat of material injury, "{t} o the extent practicable . . . the Commission may cumulatively assess the volume and price effects of imports of the subject merchandise from all countries with respect to which . . . petitions were filed . . . on the same day . . . if such imports compete with each other and with domestic like products in the United States market."<sup>87</sup> In contrast, the Commission has the discretion not to cumulate subject imports for purposes of determining whether there is threat of material injury. <sup>88</sup> In deciding whether to exercise this discretion:

{t}he Commission has traditionally considered factors such as (1) whether the imports are increasing at similar rates in the same markets, (2) whether the imports have similar margins of underselling, and (3) the probability that imports will enter the United States at prices that would have a depressing or suppressing effect on domestic prices of that merchandise. 89

Wire rod imports from Turkey should not be cumulated with other subject imports. In past cases, the Commission has declined to cumulate for threat purposes where one country's

<sup>87 19</sup> U.S.C. § 1677(7)(H).

<sup>&</sup>lt;sup>88</sup> See e.g. Certain Magnesia Carbon Bricks from China and Mexico, Inv. Nos. 701-TA-468 and 731-TA-1166-1167, USITC Pub. 4182, at 34-35 (Sept. 2010) (final) ("Magnesia Carbon Bricks") ("Cumulation for determining threat of material injury, in contrast to cumulation for material injury, is within the discretion of the Commission."); Certain Steel Concrete Reinforcing Bars from Belarus, China, Korea, Lativa, and Moldova, Inv. Nos. 731-TA-873-784 and 877-879, USITC Pub. 3440, at 6 (July 2001) (final).

<sup>&</sup>lt;sup>89</sup> Magnesia Carbon Bricks at 34-35.

imports are decreasing while the others are increasing. Wire rod exports from Turkey

[ ] in 2015 at [ ] ST but declined by more than [ ]% to [ ] in 2016,

before the petition was filed in March of 2017. Projections for 2017 and 2018, [ ] ST

and [ ] ST respectively, are [ ]. Projections for 2017 and 2018, [ ] ST

(percentage) of imports accounted for by imports from Turkey decreased by more than 50% from 2014 to 2016. At the same time, imports from other countries increased in percentage (Belarus, Italy, Russia, South Africa, Spain, Ukraine, and UAE) or did not decrease by the same percentage as Turkey (Korea and the United Kingdom).

Additionally, in *Certain Magnesia Carbon Bricks from China and Mexico*, the Commission held that differing incentives to ship product to the U.S. market supported a finding that imports should not be cumulated for threat purposes. Specifically, the ITC found that Mexican producers had less of an incentive to ship product to the U.S. due to higher operating margins on their home market sales. In contrast, Chinese producers had a significant incentive to ship their product to the U.S. and these differing incentives supported the Commision's decision to not cumulate subject imports for purposes of its threat analysis. <sup>96</sup>

Similarly, the strong home and regional markets for Turkish producers decrease the incentive to ship product to the United States. Instead, they will continue to sell their product in their home market or to other export markets where demand for Turkish product is strong. Given

<sup>&</sup>lt;sup>90</sup> Magnesia Carbon Bricks at 35-36; Steel Wire Rope from China, India, Malaysia, and Thailand, Inv. Nos. 731-TA-868-871, USITC Pub. 3294, at 18 (Apr. 2000) (prelim.); Certain Structural Steel Beams from Germany, Japan, Korea, and Spain, Inv. Nos. 701-TA-401 and 731-TA-852-855, USITC Pub. 3225, at 21-22 (Sept. 1999) (prelim.).
<sup>91</sup> Staff Report at VII-42 (Table VII-22).

<sup>&</sup>lt;sup>92</sup> *Id*.

<sup>&</sup>lt;sup>93</sup> *Id.* at IV-4 (Table IV-2).

<sup>94</sup> Id.

<sup>95</sup> Magnesia Carbon Bricks at 36.

<sup>&</sup>lt;sup>96</sup> *Id*.

the divergent volume trends of the different subject countries and the differing incentives driving those trends, the Commission should decline to cumulate.

The imports from the subject countries have varying margins of underselling but overall imports from Turkey had the lowest average margin of underselling, at only [ 1%.<sup>97</sup> All other subject countries had [ average margins of underselling, ranging from [ 1.98 Seven of the ten subject countries had average underselling 1%. 99 The overall average underselling margin was 12.9%, which is margins of more than [ 1% higher than the average margin of underselling for Turkev. 100 Turkev's overall almost [ levels of underselling and overselling were decidedly more mixed than other subject imports by JST, which represented [ volume, with Turkey overselling [ 1% of the total quantity of wire rod that oversold the U.S. product. 101 The quantity of wire rod from Turkey that undersold the U.S. product accounted for less than [ ]% of the total quantity that undersold the U.S. product. 102 This shows that **other** subject imports had more persistent, and pronounced, underselling.

There are differences in the product mix being shipped from the ten sources. Turkey exports Products [ ] but has minimal exports of [ ]. 103 [ ] all had imports of [ ] into the United States. 104 [ ] imported [ ] tire cord to the U.S., as opposed to

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97 Staff Report at V-30 (Table V-10a).
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<sup>98</sup> Id

<sup>&</sup>lt;sup>99</sup> Id.

<sup>&</sup>lt;sup>100</sup> *Id*.

<sup>101</sup> *Id*.

<sup>102 7 1</sup> 

<sup>&</sup>lt;sup>103</sup> *Id.* at V-9 - V-20 (Tables V-3 to V-8).

<sup>&</sup>lt;sup>104</sup> *Id.* at V-15 - V-16 (Table V-6).

<sup>&</sup>lt;sup>105</sup> *Id.* at V-17 - V-18 (Table V-7).

[ ]. 106 As a result, each country has its own unique mix of imports into the United States and, therefore, these do not compete directly with each other.

Lastly, there is a low probability that imports from Turkey will have a price depressing or suppressing effect on domestic prices. Imports from Turkey are unlikely to suppress or depress prices in light of the projected relatively low shipment volumes for 2017 and 2018 compared to U.S. apparent consumption. Turkish mills have been operating at near full capacity, and the growth in Turkey's home market and other export markets close to Turkey like Egypt and Europe are increasing in volume. Turkish inventories are low, and the projected lower import volumes for Turkish product in 2017-2018 are not likely to have a price depressing or suppressing effect.

The factors discussed above show that imports from Turkey will only have a limited effect on the domestic wire rod market and should not be cumulated with imports from the nine other countries for purposes of the threat analysis.

# VI. THE DOMESTIC INDUSTRY IS NOT THREATENED WITH MATERIAL INJURY BY IMPORTS FROM TURKEY

In evaluating whether a U.S. industry is threatened with material injury, the Commission must consider "whether further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted . . . ."<sup>108</sup> However, "{s}uch a determination may not be made on the basis of mere conjecture or supposition."<sup>109</sup> "An affirmative threat determination must be based upon

<sup>&</sup>lt;sup>106</sup> *Id.* at I-34 (Table I-8).

<sup>&</sup>lt;sup>107</sup> See id. at IV-25 - IV-26 (Table IV-12).

<sup>&</sup>lt;sup>108</sup> 19 U.S.C. § 1677(7)(F)(ii).

<sup>&</sup>lt;sup>109</sup> *Id*.

'positive evidence tending to show an intention to increase the levels of importation.'"<sup>110</sup> In making its threat determination, the Commission analyzes a series of factors, which are addressed below.<sup>111</sup> None of the available evidence points to the likelihood of substantially increased imports from Turkey in the imminent future, nor does it point to the likelihood of adverse price effects from imports from Turkey in the imminent future. Accordingly, the weight of the evidence supports a negative threat determination on a decumulated basis as to Turkey. If the Commission makes its threat determination on a cumulated basis, the evidence on the record shows that the U.S. industry is not threatened by subject imports due to the financial position of the U.S. industry, the decreasing levels of subject imports and demand in the U.S. market.

## A. The Domestic Industry Is Not Vulnerable

Apart from consideration of the statutorily enumerated factors, the Commission often examines whether the domestic industry is vulnerable. As discussed above, the record of this investigation shows that the industry is far from being in a "weakened state." It is not vulnerable.

B. Capacity Utilization in Turkey Is High And There Are No Imminent, Substantial Increases That Would Indicate the Likelihood of Substantially Increased Imports of Subject Merchandise into the United States

For there to be a significant, imminent increase in shipments of wire rod to the United States, the producers in Turkey would need to have significant available capacity to produce wire rod, the ability and the incentive to redirect wire rod produced for other markets to the U.S.

<sup>&</sup>lt;sup>110</sup> Metallverken Nederland B.V. v. United States, 744 F. Supp. 281, 287 (Ct. Int'l Trade 1990), quoting Am. Wire Corp. v. United States, 590 F. Supp. 1273, 1280 (Ct. Int'l Trade 1984), aff'd sub nom. Armco, Inc. v. United States, 760 F.2d 249 (Fed. Cir. 1985) (emphasis added).

<sup>&</sup>lt;sup>111</sup> 19 U.S.C. §§ 1677(7)(F)(i)(I-IX). Factor I is not relevant because no subsidy is involved. Factor VII is not applicable because this investigation does not involve an agricultural product.

<sup>&</sup>lt;sup>112</sup> See, e.g., Liquid Sulfur Dioxide from Canada, Inv. No. 731-TA-1098, USITC Pub. 3826, at 24 (Dec. 2005) (prelim.).

market, and/or the ability and incentive to shift capacity from the production of similar products to the production of wire rod. None of these conditions is present in this case.

As the Staff Report shows, the Turkish Producers have produced wire rod at high capacity utilization levels, and their production is directed at their home market and export markets other than the United States. 113 Their capacity utilization rates were 85.7% in 2016, the year they exported the smallest volume of subject merchandise to the United States, which is further evidence that their home and other export markets require the vast majority of their production. 114 Even taking into consideration the modest increase in capacity that is predicted between 2016 and 2017, total home market shipments for the Turkish Producers consistently represented more than 70% of all shipments annually in 2014, 2015, and 2016, and projections for 2017 and 2018 are that home market shipments will be more than 73%. 115 Exports to markets other than the United States continue to increase, almost doubling from 12.9% in 2015 to 23.4% in 2016, and projected to remain above 20.0% in 2017 and 2018. These export markets include the European, Middle Eastern and African markets, which are some of the strongest in the world. 117 Since the Turkish producers have been running at high capacity to serve their strong home and non-U.S. export markets, and are expected to continue to do so even with the modest increase in capacity, it does not make economic or business sense for Turkey to abandon its current strategy and divert substantial product to the U.S. market.

<sup>&</sup>lt;sup>113</sup> See Staff Report at VII-42 (Table VII-22).

<sup>&</sup>lt;sup>114</sup> See id.

<sup>&</sup>lt;sup>115</sup> *Id*.

<sup>&</sup>lt;sup>116</sup> *Id* 

<sup>&</sup>lt;sup>117</sup> See generally, articles discussing demand in Turkey and regional export markets, attached at Exhibits 7-9.

## C. The Volume of Subject Imports from Turkey Will Not Increase Substantially Due to High Demand in the Domestic Market and Regional Export Markets

## 1. Turkey's Main Export Markets

In 2016, before the March 2017 filing of the petitions, exports by Turkish Producers to the U.S. market had already substantially decreased from 2014 and 2015 levels. <sup>118</sup> At the same time, Turkey substantially increased its shipments to other export markets. That is, while exports to the U.S. were dropping from 39.6% in 2014 to 11.6% in 2016, exports from Turkey to all other markets went from approximately 60% in 2014 to almost 90% in 2016. <sup>119</sup> Turkish producers began to substantially expand business in countries such as Egypt, the Netherlands, Spain, Portugal and Israel, while at the same time all other destination markets other than the U.S. were 28.5% of all exports. <sup>120</sup> These countries and regions continue to be robust markets for wire rod from Turkey. There is no expectation that demand will be significantly reduced in these countries. Egypt is investing heavily in infrastructure and large scale construction projects including the construction of a new capital city, an international airport and economic zones. <sup>121</sup> Similarly, Saudi Arabia and Germany also expect increased construction which will sustain demand for Turkish wire rod. <sup>122</sup>

High levels of capacity utilization for Turkish wire rod producers, combined with the existence of multiple strong export markets where Turkey has been and continues to be successful, make it unlikely that Turkish imports will be diverted to the U.S. market.

<sup>&</sup>lt;sup>118</sup> *Id.* at VII-44 - VII-45 (Table VII-24).

<sup>&</sup>lt;sup>119</sup> See id.

<sup>&</sup>lt;sup>120</sup> See id.

<sup>&</sup>lt;sup>121</sup> See Egypt: 2016/2017 Discovering Business, attached at Exhibit 7.

<sup>&</sup>lt;sup>122</sup> See PR Newswire, Construction in Saudi Arabia - Key Trends and Opportunities to 2020 (Apr. 19, 2016), attached at **Exhibit 8**, and Erich Gluch, BAU Info Talks: The German and European construction industry to 2018, IFO Institute (Oct. 13, 2016), attached at **Exhibit 9**.

## 2. Turkey's Domestic Market

Turkey is a high growth market due to its economic growth, large population and rising incomes. The IMF's World Economic Outlook estimates continued economic growth for Turkey in the long term through 2018. According to IMF data, economic growth is expected to increase 5.1% in 2017 and 3.5% in 2018. A sizeable amount of the Turkish wire rod production is dedicated to the domestic market. Official Turkish statistics show that total value of domestic construction in Turkey has increased in the last three years. News sources report that investments in the construction sector in Turkey, including housing construction, industrial developments, power plants, and other projects continue to increase. 126

The Staff Report shows that the home market shipments consistently take more than 70% of Turkey's wire rod production, and that percentage is projected to grow in 2017 and 2018 to almost 75%. Strong demand in Turkey's home market means that Turkey's wire rod production will continue to be absorbed in Turkey's home market (as well as its traditional export markets), and will not be diverted to the United States.

## 3. No Likelihood of Substantial Increase in Imports from Turkey

As noted previously, wire rod exports from Turkey to the United States peaked in 2015 at 224,251 Short Tons (accounting for 5.9 of U.S. consumption in the merchant market), but declined by more than 60% to 85,315 ST in 2016 (with a corresponding decline to 2.3% of U.S. consumption in the merchant market), before the petition was filed in March of 2017. Projections for 2017 and 2018, at 121,078 and 79,918 respectively, are well below the 2015 peak

<sup>&</sup>lt;sup>123</sup> See Exhibit 10 (International Monetary Fund, World Economic Outlook: Seeking Sustainable Growth, Short-Term Recovery, Long-Term Challenges, Annex Table 1.1.1, Europe: Real GDP, Consumer Prices Current Account, and Unemployment (Oct. 2017).

<sup>&</sup>lt;sup>124</sup> Staff Report at VII-42 (Table VII-22).

<sup>&</sup>lt;sup>125</sup> See Turkish Domestic Construction Activity, attached at Exhibit 11.

<sup>&</sup>lt;sup>126</sup> See Exhibit 12, attaching Articles related to Construction Projects in Turkey.

<sup>&</sup>lt;sup>127</sup> Staff Report at VII-42 (Table VII-22).

<sup>&</sup>lt;sup>128</sup> *Id.* at IV-31 - IV-32 (Table IV-15) and at VII-42 (Table VII-22).

and account for only 3.6% or less of U.S. consumption in the merchant market.<sup>129</sup> Therefore, there has not been a significant rate of increase of the volume or market penetration of imports from Turkey that would indicate the likelihood of substantially increased imports.<sup>130</sup> To the contrary, Turkey's strong home market and other export markets make it highly unlikely that imports from Turkey into the U.S. would substantially increase.

D. Subject Imports from Turkey Are Not Entering at Prices that Are Likely to Have a Significant Depressing and Suppressing Effect on Domestic Price and Are Not Likely To Increase Demand for Further Imports

Subject imports from Turkey had the [ ] average margin of underselling, at only [ ]%.<sup>131</sup> By contrast, seven of the ten subject countries had average underselling margins of [ ]%.<sup>132</sup> The overall average underselling margin was 12.9 %, which is almost [ ]% higher than the average margin of underselling for Turkey.<sup>133</sup> Turkey oversold [ ] ST, which represented [ ]% of the total quantity of wire rod that oversold the U.S. product.<sup>134</sup> The quantity of wire rod from Turkey that undersold the U.S. product accounted for less than [ ]% of the total quantity that undersold the U.S. product.<sup>135</sup> The overselling by imports from Turkey and lower percentage of underselling by imports from Turkey limit any significant depressing and suppressing effect on domestic prices. Further, the Staff Report shows that exports from Turkey have the same or higher unit values in dollars per short ton markets such as the Netherlands, Spain, Portugal and other destination markets than in exports to the

<sup>129</sup> Id

<sup>&</sup>lt;sup>130</sup> See 19 U.S.C. 1677(7)(F)(i)(III).

<sup>&</sup>lt;sup>131</sup> Staff Report at V-30 (Table V-10a).

<sup>&</sup>lt;sup>132</sup> *Id*.

<sup>&</sup>lt;sup>133</sup> *Id*.

<sup>&</sup>lt;sup>134</sup> *Id*.

<sup>&</sup>lt;sup>135</sup> *Id*.

United States.<sup>136</sup> Finally, as discussed above, a decline in raw material prices is the primary reason for the decreasing U.S. prices.

E. Imports from Turkey Subject to Any Affirmative Critical Circumstances
Determination Are Not Likely to Have Seriously Undermined the Remedial
Effect of the Order

Commerce preliminarily made a negative determination as to critical circumstances in its antidumping duty investigation of imports from Turkey. Commerce also preliminarily made a negative critical circumstances determination in the countervailing duty investigation for the two mandatory respondents from Turkey, which together account for [

]<sup>139</sup> from Turkey. The "all others" companies were preliminarily found to have critical circumstances, <sup>140</sup> but [

In egative critical circumstances findings for all companies. In any event, it is our position that the subject imports that entered the U.S. market after the filing of the petition would not seriously undermine the remedial effect of the antidumping duty order that Commerce would issue because the market share and volume of imports for the Turkish Exporters and Producers is so low compared to apparent U.S. consumption. Consequently, we ask that the Commission find that critical circumstances do not exist with respect to those imports from Turkey that are subject to any affirmative critical circumstances determinations in Commerce's final determinations.

<sup>&</sup>lt;sup>136</sup> *Id.* at VII-44 (Table VII-24).

<sup>&</sup>lt;sup>137</sup> See Carbon and Alloy Steel Wire Rod From Turkey, 82 Fed. Reg. 50377 (Dep't Commerce Oct. 31, 2017) (prelim. affirm. LTFV determ. & neg. crit. circumstances).

<sup>&</sup>lt;sup>138</sup> See Carbon and Alloy Steel Wire Rod From Turkey, 82 Fed. Reg. 41929, 41930 (Dep't Commerce Sept. 5, 2017) (prelim. affirm. determ. & affirm. crit. circumstances in part) ("CVD Wire Rod Prelim. Determination").

<sup>139</sup> Staff Report at VII-40 (Table VII-21).

<sup>&</sup>lt;sup>140</sup> CVD Wire Rod Prelim. Determination at 41930.

## VII. CONCLUSION

For the reasons stated, there are ample grounds for the Commission to determine that there is no material injury, or threat of material injury, to the domestic industry caused by subject imports. On a cumulated basis, the U.S. industry has not been materially injured and is not threatened with material injury by subject imports. Finally, in any threat determination, the Commission should exercise its discretion not to cumulate imports from Turkey with those from the other subject countries and find that imports from Turkey do not pose a threat of injury to the domestic industry.

Respectfully submitted,

Matthew M. Nolan Andrew Jaxa-Debicki Nancy A. Noonan

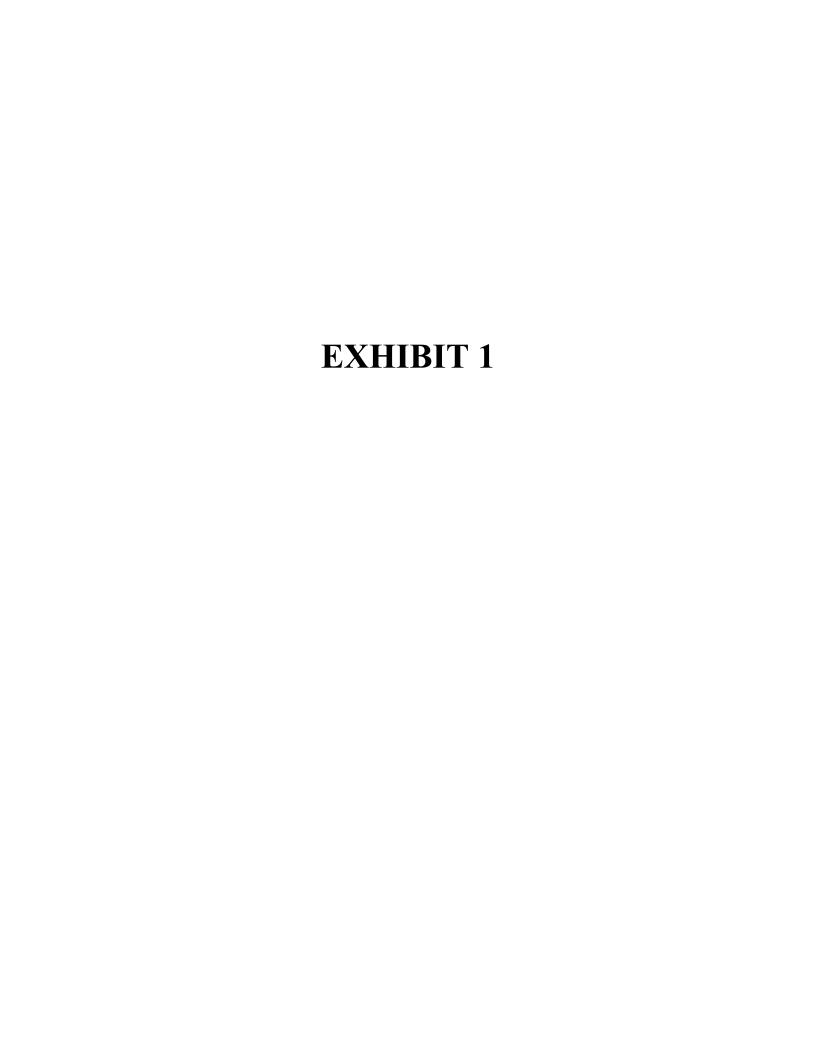
Counsel to Turkish Steel Exporters Association and Icdas Celik Enerji Tersane ve Ulasim Sanayi A.S.

November 9, 2017

#### **Exhibit List**

## **Exhibit** Description

- Bureau of Economic Analysis, *Gross Domestic Product: Third Quarter 2017* (Advance Estimate) (Oct. 27, 2017) and *Gross Domestic Product: Second Quarter 2017 (Third Estimate)*, Corporate Profits: Second Quarter 2017 (Revised Estimate) (Sept. 27, 2017)
- 2 Kermit Baker, Even with uncertainties looming, healthy gains projected for 2017 building activity, AIA (Jan. 25, 2017)
- Nat Rudarakanchana, *Domestic wire rod prices rise with scrap*, AMM (Mar. 23, 2017)
- 4 American Metal Market, *Past Monthly Averages for Scrap & Wire Rod, Jan. 2014 Sept. 2017* (Oct. 30, 2017)
- 5 Articles related to closing of Georgetown Mill
- 6 American Metal Market articles related to Wire Rod Pricing & Sales, 2015-2017
- 7 Egypt: 2016/2017 Discovering Business
- 8 PR Newswire, Construction in Saudi Arabia Key Trends and Opportunities to 2020 (Apr. 19, 2016)
- 9 Erich Gluch, *BAU Info Talks: The German and European construction industry to 2018*, IFO Institute (Oct. 13, 2016)
- International Monetary Fund, *World Economic Outlook: Seeking Sustainable Growth, Short-Term Recovery, Long-Term Challenges*, Annex Table 1.1.1, Europe: Real GDP, Consumer Prices Current Account, and Unemployment (Oct. 2017)
- 11 Chart: Turkish Domestic Construction Activity
- 12 Articles related to Construction Projects in Turkey





## **News Release**

EMBARGOED UNTIL RELEASE AT 8:30 A.M. EDT, FRIDAY, OCTOBER 27, 2017 BEA 17-56

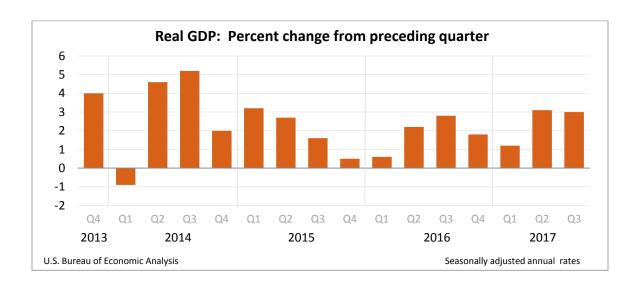
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# Gross Domestic Product: Third Quarter 2017 (Advance Estimate)

**Real gross domestic product** (GDP) increased at an annual rate of 3.0 percent in the third quarter of 2017 (table 1), according to the "advance" estimate released by the Bureau of Economic Analysis. In the second quarter, real GDP increased 3.1 percent.

The Bureau emphasized that the third-quarter advance estimate released today is based on source data that are incomplete or subject to further revision by the source agency (see "Source Data for the Advance Estimate" on page 2). The "second" estimate for the third quarter, based on more complete data, will be released on November 29, 2017.



The increase in real GDP in the third quarter reflected positive contributions from personal consumption expenditures (PCE), private inventory investment, nonresidential fixed investment, exports, and federal government spending. These increases were partly offset by negative contributions from residential fixed investment and state and local government spending. Imports, which are a subtraction in the calculation of GDP, decreased (table 2).



The deceleration in real GDP growth in the third quarter primarily reflected decelerations in PCE, in nonresidential fixed investment, and in exports that were partly offset by an acceleration in private inventory investment and a downturn in imports.

**Current-dollar GDP** increased 5.2 percent, or \$245.5 billion, in the third quarter to a level of \$19,495.5 billion. In the second quarter, current-dollar GDP increased 4.1 percent, or \$192.3 billion (table 1 and table 3).

The **price index for gross domestic purchases** increased 1.8 percent in the third quarter, compared with an increase of 0.9 percent in the second quarter (table 4). **The PCE price index** increased 1.5 percent, compared with an increase of 0.3 percent. Excluding food and energy prices, the PCE price index increased 1.3 percent, compared with an increase of 0.9 percent (appendix table A).

### Personal Income (table 10)

**Current-dollar personal income** increased \$113.7 billion in the third quarter, compared with an increase of \$119.1 billion in the second. The deceleration in personal income primarily reflected decelerations in personal dividend income, in rental income, and in wages and salaries that were offset by an acceleration in government social benefits, a smaller decrease in personal interest income, an acceleration in nonfarm proprietors' income, and a smaller decrease in farm proprietors' income.

**Disposable personal income** increased \$73.6 billion, or 2.1 percent, in the third quarter, compared with an increase of \$125.1 billion, or 3.6 percent, in the second. **Real disposable personal income** increased 0.6 percent, compared with an increase of 3.3 percent.

**Personal saving** was \$494.8 billion in the third quarter, compared with \$545.6 billion in the second. The **personal saving rate** -- personal saving as a percentage of disposable personal income -- was 3.4 percent in the third quarter, compared with 3.8 percent in the second.

#### Source Data for the Advance Estimate

Information on the source data in the advance estimate is provided in a <u>Technical Note</u> that is posted with the news release on BEA's Web site. A detailed "<u>Key Source Data and Assumptions</u>" file is also posted for each release. For information on updates to GDP, see the "Additional Information" section that follows.

\* \* \*

Next release: November 29, 2017 at 8:30 A.M. EST Gross Domestic Product: Third Quarter 2017 (Second Estimate) Corporate Profits: Third Quarter 2017 (Preliminary Estimate)



## **Release Dates in 2018**

Estimate	2017 Q4 and 2017 annual	2018 Q1	2018 Q2	2018 Q3
		Gross Domestic Produ	uct	
Advance	January 26	April 27	July 27	October 26
Second	February 28	May 30	August 29	November 28
Third	March 28	June 28	September 27	December 21
		<b>Corporate Profits</b>		
Preliminary		May 30	August 29	November 28
Revised	March 28	June 28	September 27	December 21



## **Additional Information**

#### Resources

Additional resources available at www.bea.gov:

- Stay informed about BEA developments by reading the BEA <u>blog</u>, signing up for BEA's <u>email</u> <u>subscription service</u>, or following BEA on Twitter @BEA News.
- Historical time series for these estimates can be accessed in BEA's interactive data application.
- Access BEA data by registering for BEA's data application programming interface (API).
- For more on BEA's statistics, see our monthly online journal, the <u>Survey of Current Business</u>.
- BEA's news release schedule
- NIPA Handbook: Concepts and Methods of the U.S. National Income and Product Accounts

#### **Definitions**

**Gross domestic product** (GDP) is the value of the goods and services produced by the nation's economy less the value of the goods and services used up in production. GDP is also equal to the sum of personal consumption expenditures, gross private domestic investment, net exports of goods and services, and government consumption expenditures and gross investment.

**Current-dollar estimates** are valued in the prices of the period when the transactions occurred—that is, at "market value." Also referred to as "nominal estimates" or as "current-price estimates."

**Real values** are inflation-adjusted estimates—that is, estimates that exclude the effects of price changes.

The *gross domestic purchases price index* measures the prices of final goods and services purchased by U.S. residents.

The *personal consumption expenditure price index* measures the prices paid for the goods and services purchased by, or on the behalf of, "persons."

**Personal income** is the income received by, or on behalf of, all persons from all sources: from participation as laborers in production, from owning a home or business, from the ownership of financial assets, and from government and business in the form of transfers. It includes income from domestic sources as well as the rest of world. It does not include realized or unrealized capital gains or losses.

**Disposable personal income** is the income available to persons for spending or saving. It is equal to personal income less personal current taxes.

**Personal outlays** is the sum of personal consumption expenditures, personal interest payments, and personal current transfer payments.

**Personal saving** is personal income less personal outlays and personal current taxes.

The *personal saving rate* is personal saving as a percentage of disposable personal income.

For more definitions, see the <u>Glossary: National Income</u> and <u>Product Accounts</u>.

#### Statistical conventions

**Annual rates.** Quarterly values are expressed at seasonally-adjusted annual rates (SAAR), unless otherwise specified. Dollar changes are calculated as the difference between these SAAR values. For detail, see the FAQ "Why does BEA publish estimates at annual rates?"

**Percent changes** in quarterly series are calculated from unrounded data and are displayed at annual rates, unless otherwise specified. For details, see the FAQ "How is average annual growth calculated?"

**Quantities and prices.** Quantities, or "real" volume measures, and prices are expressed as index numbers with a specified reference year equal to 100 (currently 2009). Quantity and price indexes are calculated using a Fisher-chained weighted formula that incorporates weights from two adjacent periods (quarters for quarterly data and annuals for annual data). "Real" dollar series are calculated by multiplying the published quantity index by the current-dollar value in the reference year (2009) and then dividing by 100. Percent changes calculated from real quantity indexes and chained-dollar levels are conceptually the same; any differences are due to rounding.

**Chained-dollar values** are not additive because the relative weights for a given period differ from those of the reference year. In tables that display chained-dollar values, a "residual" line shows the difference between the sum of detailed chained-dollar series and its corresponding aggregate.



#### **Updates to GDP**

BEA releases three vintages of the current quarterly estimate for GDP: "Advance" estimates are released near the end of the first month following the end of the quarter and are based on source data that are incomplete or subject to further revision by the source agency; "second" and "third" estimates are released near the end of the second and third months, respectively, and are based on more detailed and more comprehensive data as they become available.

Annual and comprehensive updates are typically released in late July. Annual updates generally cover at least the 3 most recent calendar years (and their associated quarters) and incorporate newly available major annual source data as well as some changes in methods and definitions to improve the accounts. Comprehensive (or benchmark) updates are carried out at about 5-year intervals and incorporate major periodic source data, as well as major conceptual improvements.

The table below shows the average revisions to the quarterly percent changes in real GDP between different estimate vintages, without regard to sign.

	Average Revision
	Without Regard to Sign
Vintage	(percentage points, annual rates)
Advance to second	0.5
Advance to third	0.6
Second to third	0.2
Advance to latest	1.3
1	

Note - Based on estimates from 1993 through 2016. For more information on GDP updates, see <u>Revision Information</u> on the BEA Web site.

The larger average revision from the advance to the latest estimate reflects the fact that periodic comprehensive updates include major statistical and methodological improvements.

Unlike GDP, an advance current quarterly estimate of GDI is not released because data on domestic profits and on net interest of domestic industries are not available. For fourth quarter estimates, these data are not available until the third estimate.

#### **List of GDP News Release Tables**

- Table 1. Real Gross Domestic Product and Related Measures: Percent Change From Preceding Period
- Table 2. Contributions to Percent Change in Real Gross Domestic Product
- Table 3. Gross Domestic Product: Level and Change From Preceding Period
- Table 4. Price Indexes for Gross Domestic Product and Related Measures: Percent Change From Preceding Period
- Table 5. Real Gross Domestic Product, Quantity Indexes
- Table 6. Price Indexes for Gross Domestic Product
- Table 7. Real Gross Domestic Product: Percent Change From Preceding Year
- Table 8. Real Gross Domestic Product: Percent Change From Quarter One Year Ago
- Table 9. Relation of Gross Domestic Product, Gross National Product, and National Income
- Table 10. Personal Income and Its Disposition

Appendix Table A. Real Gross Domestic Product and Related Aggregates and Price Indexes: Percent Change From Preceding Period and Contributions to Percent Change

Table 1. Real Gross Domestic Product and Related Measures: Percent Change From Preceding Period

										S	easonall	y adjust	ed at anr	nual rate	es .						
Line		2014	2015	2016	2013		20	14			20	15			20	16			2017		Line
					Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
1	Gross domestic product (GDP)	2.6	2.9	1.5	4.0	-0.9	4.6	5.2	2.0	3.2	2.7	1.6	0.5	0.6	2.2	2.8	1.8	1.2	3.1	3.0	1
2	Personal consumption expenditures	2.9	3.6	2.7	3.4	1.9	3.5	3.9	5.1	3.7	3.0	2.8	2.7	1.8	3.8	2.8	2.9	1.9	3.3	2.4	2
3	Goods	3.9	4.6	3.7	4.0	2.4	6.2	4.5	5.7	4.2	4.5	4.4	2.8	2.1	6.0	3.2	4.7	0.7	5.4	4.2	3
4	Durable goods	6.9	7.7	5.5	4.9	5.5	13.2	7.7	8.3	7.8	8.6	5.0	4.2	1.0	8.5	9.4	9.2	-0.1	7.6	8.3	4
5	Nondurable goods	2.5	3.1	2.8	3.6	0.9	3.0	3.0	4.5	2.4	2.5	4.0	2.2	2.6	4.7	0.1	2.5	1.1	4.2	2.1	5
6	Services	2.4	3.2	2.3	3.1	1.7	2.1	3.6	4.7	3.4	2.3	2.0	2.6	1.7	2.8	2.7	2.1	2.5	2.3	1.5	6
7	Gross private domestic investment	5.5	5.2	-1.6	5.4	-5.7	15.6	11.5	-1.3	13.1	0.8	2.0	-6.2	-4.0	-2.7	2.4	8.5	-1.2	3.9	6.0	7
8	Fixed investment	6.2	3.9	0.7	6.6	5.1	10.2	9.2	0.3	4.1	4.7	3.4	-2.4	-0.2	1.4	1.5	1.7	8.1	3.2	1.5	8
9	Nonresidential	6.9	2.3	-0.6	9.5	7.2	9.4	10.5	-2.3	2.2	2.9	1.5	-5.1	-4.0	3.3	3.4	0.2	7.2	6.7	3.9	9
10	Structures	10.5	-1.8	-4.1	2.1	21.4	12.2	-1.8	4.7	-2.1	4.6	-15.2	-21.4	2.3	0.5	14.3	-2.2	14.8	7.0	-5.2	10
11	Equipment	6.6	3.5	-3.4	19.5	0.8	10.9	19.2	-11.8	8.2	0.8	10.0	-4.6	-13.1	-0.6	-2.1	1.8	4.4	8.8	8.6	11
12	Intellectual property products	4.6	3.8	6.3	1.1	7.0	5.1	7.7	8.2	-2.9	4.9	2.9	8.0	6.3	11.1	4.2	-0.4	5.7	3.7	4.3	12
13	Residential	3.5	10.2	5.5	-4.5	-2.8	13.2	4.5	10.9	11.4	11.7	10.6	7.3	13.4	-4.7	-4.5	7.1	11.1	-7.3	-6.0	13
14	Change in private inventories																				14
15	Net exports of goods and services																				15
16	Exports	4.3	0.4	-0.3	11.8	-2.4	9.2	0.6	4.9	-4.5	3.7	-4.0	-2.3	-2.6	2.8	6.4	-3.8	7.3	3.5	2.3	16
17	Goods	4.6	-0.4	0.3	15.7	-6.0	10.7	2.2	4.6	-8.6	5.4	-4.9	-3.8	0.3	2.8	8.1	-3.4	10.8	2.2	1.4	17
18	Services	3.6	2.1	-1.5	3.7	5.9	5.9	-2.7	5.8	4.6	0.5	-2.1	0.7	-7.8	2.7	3.2	-4.6	1.0	6.2	4.1	18
19	Imports	4.5	5.0	1.3	1.6	5.0	10.2	-1.0	10.8	6.7	3.3	1.7	0.0	-0.2	0.4	2.7	8.1	4.3	1.5	-0.8	19
20	Goods	4.9	5.2	0.9	1.6	5.8	11.0	-1.1	11.3	7.9	3.1	0.7	-0.4	-0.5	0.3	1.2	9.2	4.7	1.3	-0.5	20
21	Services	2.6	4.0	3.1	1.3	1.2	6.5	-0.5	8.6	1.4	4.4	6.5	1.6	1.1	1.0	9.0	3.2	2.5	2.2	-2.1	21
22	Government consumption expenditures																				
0.0	and gross investment	-0.6	1.4	0.8	-2.8	-0.6	1.1	2.1	-0.6	1.5	3.4	1.2	0.3	1.8	-0.9	0.5	0.2	-0.6	-0.2	-0.1	22
23	Federal	-2.4	-0.1	0.0	-5.7	-0.3	-1.6	3.1	-5.6	1.5	1.8	-1.1	2.5	-1.5	-0.9	1.6	-0.5	-2.4	1.9	1.1	23
24	National defense	-4.0	-2.2	-0.7	-4.2	-5.4	-1.6	2.4	-10.9	-1.0	2.1	-4.5	3.6	-2.7	-2.1	2.5	-3.2	-3.3	4.7	2.3	24
25	Nondefense	0.2	3.2	1.2	-8.1	8.4	-1.5	4.1	3.3	5.5	1.3	4.2	0.9	0.2	0.8	0.3	3.6	-1.2	-1.9	-0.5	25
26	State and local	0.5	2.3	1.2	-1.0	-0.8	2.8	1.5	2.6	1.5	4.5	2.6	-1.1	3.9	-1.0	-0.2	0.6	0.5	-1.5	-0.9	26
27	Addenda:	2.1	2.0	0.0	2.5	1 /	F 7	4.0	4.0	1.0	2.5	0.7	1 -	0.0	0.0	4.1	17	2.7	2.0		27
27	Gross domestic income (GDI) <sup>1</sup>	3.1	3.0	0.9	2.5 3.2	1.6	5.7 5.2	4.8 5.0	4.8	1.9	2.5	0.6	1.5	-0.3	0.2 1.2	4.1	-1.7	2.7	2.9		27 28
28 29	Average of GDP and GDI	2.8	2.9	1.2		0.3			3.4	2.6	2.6	1.1	1.0	0.1		3.4	0.0	2.0	3.0	n	29
	Final sales of domestic product		2.6		4.1	0.9	3.7	4.8	2.3	1.8	3.4	1.9	1.2	1.2	2.9	2.6	0.7	2.7	2.9	2.3	30
30 31	Gross domestic purchases Final sales to domestic purchasers	2.7	3.5	1.7 2.1	2.6 2.7	0.2 2.0	4.9 4.1	4.8	3.0	4.8 3.4	2.7 3.4	2.4	0.7 1.4	0.8 1.5	1.9 2.6	2.4	3.3 2.3	1.0 2.4	2.8	1.8	31
32	Final sales to private domestic	2.1	3.3	2.1	2.1	2.0	4.1	4.4	ა.ა	3.4	3.4	2.0	1.4	1.0	2.0	2.2	2.3	2.4	2.1	1.0	31
	purchasers	3.5	3.7	2.3	4.0	2.5	4.7	4.9	4.1	3.7	3.3	2.9	1.7	1.4	3.3	2.6	2.7	3.1	3.3	2.2	32
33	Gross national product (GNP)	2.5	2.7	1.4	3.9	-1.2	4.3	5.5	1.4	3.2	2.1	1.6	1.0	-0.3	2.6	2.6	2.6	0.9	2.8		33
34	Disposable personal income	3.6	4.2	1.4	0.9	4.3	5.3	4.2	5.9	4.3	3.8	1.8	2.9	0.2	1.9	0.7	-1.8	2.9	3.3	0.6	34
	Current-dollar measures:																				
35	GDP	4.4	4.0	2.8	6.1	0.7	7.0	7.1	2.6	3.2	5.0	3.0	1.3	0.8	4.7	4.2	3.8	3.3	4.1	5.2	35
36	GDI	4.9	4.1	2.1	4.7	3.3	8.1	6.8	5.4	1.9	4.7	2.0	2.4	-0.1	2.6	5.5	0.3	4.7	3.9		36
37	Average of GDP and GDI	4.7	4.0	2.5	5.4	2.0	7.6	7.0	4.0	2.5	4.8	2.5	1.8	0.4	3.7	4.9	2.1	4.0	4.0		37
38	Final sales of domestic product	4.5	3.8	3.2	6.4	2.5	6.0	6.8	2.9	1.8	5.7	3.3	2.0	1.6	5.4	4.1	2.7	4.8	4.0	4.5	38
39	Gross domestic purchases	4.4	3.9	2.7	4.7	2.5	6.7	6.4	3.2	3.5	4.1	3.4	1.0	0.9	4.1	3.9	5.3	3.6	3.6	4.3	39
40	Final sales to domestic purchasers	4.5	3.8	3.1	5.0	4.2	5.8	6.0	3.5	2.1	4.9	3.7	1.7	1.7	4.7	3.8	4.1	5.0	3.5	3.6	40
41	Final sales to private domestic purchasers	5.2	4.2	3.5	5.9	4.9	6.5	6.5	4.3	2.6	4.7	4.1	1.8	1.9	5.4	4.3	4.7	5.2	4.0	3.9	41
42	GNP	4.3	3.8	2.7	6.1	0.4	6.6	7.4	2.0	3.0	4.4	3.0	1.9	-0.1	5.1	4.0	4.7	2.9	3.8	3.7	42
43	Disposable personal income	5.1	4.5	2.6	2.6	6.5	7.1	5.5	5.7	2.6	5.6	3.2	3.1	0.9	4.0	2.5	0.1	5.2	3.6	2.1	43
.5		0.1	5	2.3	2.3	0.0		0.0	0.,	2.3	0.0	0.2	0	0.7		5	0.7	0.2	0.0		

<sup>1.</sup> Gross domestic income deflated by the implicit price deflator for gross domestic product. See *Explanatory Note* at the end of the tables. Source: U.S. Bureau of Economic Analysis

Table 2. Contributions to Percent Change in Real Gross Domestic Product

														nual rate	S						$\overline{}$
Line		2014	2015	2016	2013		20	14			20				20	16			2017		Line
LINE		2011	2010	20.0	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	LINE
	Dercent change at annual rate.				QT	Q.1	92	25	QT	Q.	QZ	25	Q-1	Qi	QZ	25	QT	0.1	QZ	23	
	Percent change at annual rate:  Gross domestic product	2.6	2.9	1.5	4.0	-0.9	4.6	5.2	2.0	3.2	2.7	1.6	0.5	0.6	2.2	2.8	1.8	1.2	3.1	3.0	1
1	Percentage points at annual rates:	2.0	2.9	1.3	4.0	-0.9	4.0	3.2	2.0	3.2	2.1	1.0	0.5	0.0	2.2	2.0	1.0	1.2	3.1	3.0	1
2	Personal consumption expenditures	1.95	2.47	1.86	2.29	1.27	2.33	2.65	3.36	2.48	2.03	1.86	1.80	1.23	2.57	1.92	1.99	1.32	2.24	1.62	2
3	Goods	<b>0.88</b> 0.50	1.03 0.57	<b>0.81</b> 0.41	<b>0.90</b> 0.36	<b>0.52</b> 0.39	1.38 0.93	1. <b>01</b> 0.56	1.26 0.60	<b>0.93</b> 0.57	<b>0.99</b> 0.63	<b>0.95</b> 0.37	<b>0.63</b> 0.31	<b>0.46</b> 0.08	1. <b>30</b> 0.62	<b>0.69</b> 0.68	1. <b>03</b> 0.67	<b>0.15</b> -0.01	1.16 0.56	<b>0.92</b> 0.61	3
5	Durable goods	0.30	0.37	0.41	0.30	0.39	0.93	0.30	0.00	0.37	0.03	-0.01	-0.11	-0.09	0.02	0.36	0.32	-0.01	0.02	0.35	5
6	Furnishings and durable household equipment	0.14	0.14	0.12	0.08	0.06	0.28	0.13	0.14	0.11	0.13	0.15	0.14	0.09	0.15	0.10	0.09	0.08	0.15	0.13	6
7	Recreational goods and vehicles	0.15	0.18	0.18	0.07	0.09	0.22	0.25	0.20	0.14	0.13	0.17	0.23	0.11	0.25	0.16	0.22	0.21	0.26	0.00	7
8	Other durable goods	0.06	0.08	0.03	0.10	0.05	0.08	0.04	0.09	0.10	0.07	0.06	0.06	-0.03 0.38	0.04	0.06	0.04	-0.03 0.16	0.12	0.13	8
10	Food and beverages purchased for off-premises																				
11	consumption	0.07	0.03	0.13	0.22	0.10	-0.02 0.17	0.03	0.03	0.06	-0.02 0.07	0.04	0.04	0.16	0.30	0.09	0.21	0.06	0.01	0.16	10
12	Gasoline and other energy goods	-0.02	0.09	0.02	0.04	-0.11	-0.13	0.00	0.18	0.15	0.04	0.11	0.01	0.10	-0.08	-0.05	-0.03	-0.10	0.12	-0.07	12
13	Other nondurable goods	0.26	0.27	0.20	0.25	0.12	0.43	0.35	0.24	0.15	0.27	0.38	0.22	0.10	0.34	-0.06	0.15	0.28	0.28	0.24	13
14 15	Services  Household consumption expenditures (for services)	1.07 1.09	1.44	1. <b>05</b> 0.95	1.39 1.35	0.74	0.96 0.87	1. <b>64</b> 1.68	2.10 2.15	1.56 1.71	1. <b>04</b> 0.90	0.90 0.72	1.17 0.93	0.77 0.78	1.28 1.24	1.23	<b>0.97</b> 0.98	1.17 1.11	1.08	0.70	14 15
16	Housing and utilities	0.17	0.21	0.75	0.34	0.54	-0.28	-0.03	0.50	0.50	-0.10	0.72	-0.01	0.70	0.35	0.27	-0.11	-0.04	0.42	0.07	16
17	Health care	0.34	0.57	0.43	0.37	-0.22	0.65	0.81	0.82	0.60	0.24	0.44	0.31	0.50	0.62	0.13	0.62	0.24	0.15	0.18	17
18 19	Transportation services	0.11	0.09	0.08	-0.04 0.07	0.25	0.08	0.17	0.04	0.09	0.09	0.04 -0.01	0.14	0.07	0.02 -0.02	0.11	0.06	0.04	0.01	0.05	18 19
20	Recreation services Food services and accommodations	0.00	0.06	0.06	0.07	0.13	0.12	0.12	0.09	0.05	0.06	0.07	0.20	0.02	0.18	0.12	0.07	0.12	-0.03	0.10	20
21	Financial services and insurance	0.08	0.15	-0.09	0.19	-0.06	0.08	0.25	0.13	0.26	0.21	-0.09	0.01	-0.35	-0.12	0.13	0.07	0.40	0.14	0.15	21
22	Other services	0.17	0.15	0.20	0.13	0.20	0.18	0.14	0.29	0.17	0.08	0.02	0.10	0.35	0.20	0.25	0.27	0.23	0.38	0.05	22
23	Final consumption expenditures of nonprofit institutions serving households	-0.02	0.02	0.10	0.04	-0.10	0.09	-0.04	-0.06	-0.15	0.14	0.19	0.24	-0.01	0.04	0.15	-0.01	0.06	-0.04	0.03	23
24	Gross output of nonprofit institutions	0.10	0.22	0.24	0.29	-0.43	0.37	0.36	0.43	0.10	0.05	0.16	0.29	0.20	0.38	0.19	0.36	0.12	-0.23	0.05	24
25	Less: Receipts from sales of goods and services by nonprofit institutions	0.12	0.20	0.14	0.25	-0.33	0.29	0.40	0.48	0.25	-0.09	-0.03	0.05	0.21	0.34	0.04	0.38	0.06	-0.19	0.02	25
26	Gross private domestic investment	0.90	0.87	-0.28	0.91	-0.93	2.47	1.90	-0.21	2.12	0.14	0.33	-1.08	-0.68	-0.45	0.40	1.34	-0.20	0.64	0.98	26
27	Fixed investment	0.97	0.64	0.12	1.01	0.76	1.56	1.45	0.04	0.67	0.77	0.55	-0.41	-0.05	0.22	0.25	0.28	1.27	0.53	0.25	27
28 29	NonresidentialStructures	0.86	0.30	-0.08 -0.12	1.16 0.06	0.85	1.16 0.36	1.31 -0.05	-0.30 0.14	0.30	0.38	0.19 -0.50	-0.67 -0.69	-0.52 0.06	0.41	0.42	0.02 -0.06	0.86	0.82	0.49	28
30	Equipment	0.39	0.21	-0.20	1.05	0.02	0.61	1.07	-0.76	0.49	0.06	0.58	-0.28	-0.82	-0.04	-0.12	0.10	0.24	0.48	0.47	30
31	Information processing equipment	0.07	0.07	0.03	-0.04	0.07	0.25	-0.07	0.14	-0.02	0.08	0.23	0.04	-0.16	0.08	0.10	0.05	0.13	0.17	0.21	31
32 33	Computers and peripheral equipment Other	0.01	-0.02 0.09	-0.01 0.05	0.08	-0.07 0.14	0.09	-0.02 -0.05	0.03	-0.11 0.09	0.02	0.05	-0.10 0.14	-0.02 -0.14	0.01	0.00	-0.01 0.06	0.01	0.15	0.13	32
34	Industrial equipment	0.05	0.01	0.03	-0.12	0.15	0.17	0.15	-0.22	0.00	0.12	-0.02	0.09	-0.07	0.08	0.03	0.07	0.09	0.14	0.07	34
35	Transportation equipment	0.17	0.16	-0.12	0.49	-0.03	0.22	0.41	-0.25	0.50	-0.06	0.37	-0.24	-0.37	0.01	-0.23	-0.05	-0.04	0.02	0.10	35
36 37	Other equipment  Intellectual property products	0.10	-0.04 0.15	-0.14 0.25	0.72	-0.17 0.26	-0.03 0.19	0.58	-0.43 0.31	0.00 -0.11	-0.08 0.19	0.00	-0.17 0.31	-0.23 0.24	-0.21 0.43	-0.03 0.17	0.04 -0.02	0.06	0.15	0.10	36
38	Software	0.14	0.10	0.13	0.08	0.18	0.21	0.19	0.05	0.11	0.07	0.05	0.12	0.17	0.19	0.12	0.04	0.09	0.13	0.13	38
39	Research and development	0.04	0.02	0.11	-0.04	0.10	-0.01	0.09	0.23	-0.25	0.09	0.04	0.17	0.08	0.25	0.02	-0.07	0.13	0.02	0.04	39
40	Entertainment, literary, and artistic originals  Residential	0.00	0.02	0.01	0.00	-0.02 -0.09	-0.01 0.40	0.01	0.03	0.03	0.02	0.03	0.01	0.00	-0.01 -0.18	0.03 -0.18	0.02	0.01	0.00	0.01	40
42	Change in private inventories	-0.07	0.23	-0.40	-0.11	-1.69	0.91	0.44	-0.26	1.45	-0.63	-0.22	-0.68	-0.64	-0.67	0.16	1.06	-1.46	0.12	0.73	42
43	Farm	-0.08	0.03	0.00	0.06	-0.45	0.04	0.05	-0.03	0.17	-0.06	0.01	-0.09	0.00	0.14	-0.05	-0.09	0.13	-0.04	0.08	43
44 45	Nonfarm  Net exports of goods and services	0.01 <b>-0.16</b>	0.20 <b>-0.73</b>	-0.39 <b>-0.23</b>	-0.16 <b>1.29</b>	-1.25 -1.14	0.87 <b>-0.40</b>	0.40 <b>0.28</b>	-0.23 - <b>1.02</b>	1.27 <b>-1.64</b>	-0.57 <b>-0.03</b>	-0.23 <b>-0.77</b>	-0.59 <b>-0.28</b>	-0.63 - <b>0.28</b>	-0.81 <b>0.28</b>	0.20 <b>0.36</b>	1.15 <b>-1.61</b>	-1.59 <b>0.22</b>	0.15 <b>0.21</b>	0.65 <b>0.41</b>	44
46	Exports	0.58	0.05	-0.04	1.54	-0.35	1.22	0.09	0.65	-0.59	0.47	-0.51	-0.29	-0.33	0.32	0.74	-0.47	0.85	0.42	0.28	46
47	Goods	0.42	-0.03	0.02	1.38	-0.60	0.97	0.21	0.41	-0.78	0.45	-0.43	-0.32	0.01	0.21	0.60	-0.27	0.81	0.18	0.11	47
48 49	Services Imports	0.16 <b>-0.74</b>	0.09 <b>-0.78</b>	-0.06 - <b>0.19</b>	0.16 <b>-0.24</b>	0.25 <b>-0.79</b>	0.25 <b>-1.62</b>	-0.12 <b>0.18</b>	0.24 <b>-1.67</b>	0.19 <b>-1.05</b>	0.02 <b>-0.50</b>	-0.09 - <b>0.25</b>	0.03 <b>0.01</b>	-0.33 <b>0.04</b>	0.11 <b>-0.04</b>	0.13 <b>-0.37</b>	-0.19 - <b>1.14</b>	0.04 <b>-0.63</b>	0.25 <b>-0.22</b>	0.17 <b>0.12</b>	48
50	Goods	-0.74	-0.78	-0.17	-0.24	-0.76	-1.44	0.18	-1.44	-1.03	-0.38	-0.23	0.06	0.04	-0.04	-0.14	-1.14	-0.56	-0.22	0.12	50
51	Services	-0.07	-0.11	-0.09	-0.03	-0.03	-0.18	0.02	-0.23	-0.04	-0.12	-0.17	-0.05	-0.03	-0.03	-0.24	-0.09	-0.07	-0.06	0.06	51
52	Government consumption expenditures and gross investment	-0.12	0.25	0.13	-0.53	-0.11	0.20	0.39	-0.11	0.27	0.60	0.21	0.05	0.32	-0.16	0.09	0.03	-0.11	-0.03	-0.02	52
53	Federal	-0.18	-0.01	0.00	-0.42	-0.03	-0.11	0.22	-0.40	0.11	0.12	-0.07	0.17	-0.10	-0.06	0.11	-0.03	-0.16	0.13	0.08	53
54	National defense	-0.18	-0.09	-0.03	-0.19	-0.25	-0.07	0.11	-0.48	-0.04	0.08	-0.19	0.14	-0.11	-0.08	0.10	-0.13	-0.13	0.18	0.09	54
55 56	Consumption expenditures	-0.13 -0.05	-0.08 -0.02	-0.03 0.00	-0.13 -0.06	-0.03 -0.22	-0.15 0.08	0.14 -0.03	-0.47 -0.02	0.07 -0.11	0.01	-0.14 -0.04	0.07	-0.09 -0.01	-0.04 -0.04	0.10	-0.16 0.03	-0.21 0.08	0.02	0.09	55 56
57	Nondefense	0.01	0.02	0.03	-0.23	0.22	-0.04	0.11	0.09	0.15	0.04	0.11	0.02	0.00	0.02	0.00	0.10	-0.03	-0.05	-0.01	57
58	Consumption expenditures	0.00	0.07	0.02	-0.21	0.19	-0.06	0.10	0.04	0.15	0.02	0.11	0.03	-0.02	0.00	-0.01	0.06	-0.07	-0.05	0.05	58
59 60	Gross investment	0.01 <b>0.06</b>	0.01 <b>0.26</b>	0.01	-0.02 -0.11	0.03 <b>-0.09</b>	0.02 0.31	0.01 <b>0.17</b>	0.04	0.00 0.17	0.01 0.48	0.00 <b>0.28</b>	-0.01 -0.12	0.02 <b>0.42</b>	0.02 <b>-0.11</b>	0.01 <b>-</b> 0.02	0.03 <b>0.06</b>	0.04	0.00 <b>-0.16</b>	-0.06 -0.09	59 60
61	Consumption expenditures	0.06	0.20	0.15	-0.03	0.02	0.31	0.17	0.28	0.17	0.40	0.23	0.12	0.42	0.11	0.17	0.00	0.03	0.09	0.08	
62	Gross investment	0.00	0.06	-0.02	-0.08	-0.10	0.14	0.03	0.08	-0.05	0.28	0.05	-0.23	0.25	-0.24	-0.18	0.05	0.01	-0.25	-0.17	62

See *Explanatory Note* at the end of the tables. Source: U.S. Bureau of Economic Analysis

Table 3. Gross Domestic Product: Level and Change From Preceding Period—Continues

				Billions of	of dollars					Bill	lions of cha	nined (2009	) dollars				
ine			S	easonally a	ndjusted at	annual rate	es		S	easonally a	adjusted at	annual rate	es	Change	from pre period	ceding	Lin
		2016		16		2017		2016		116		2017		2016	20		
			Q3	Q4	Q1	Q2	Q3		Q3	Q4	Q1	Q2	Q3		Q2	Q3	L
1	Gross domestic product (GDP)	18,624.5	18,729.1	18,905.5	19,057.7	19,250.0	19,495.5	16,716.2	16,778.1	16,851.4	16,903.2	17,031.1	17,156.9	244.6	127.8	125.9	
2	Personal consumption expenditures	12,820.7	12,899.4	13,056.9	13,191.6	13,307.0	13,434.7	11,572.1	11,618.1	11,702.1	11,758.0	11,853.0	11,922.1	307.9	94.9	69.2	
3	Goods	4,121.4	4,134.4	4,195.9	4,230.8	4,247.2	4,298.3	4,072.2	4,090.8	4,138.4	4,145.4	4,199.9	4,243.4	144.9	54.5	43.5	
4	Durable goods	1,411.0	1,420.2	1,440.2	1,443.2	1,456.6	1,476.3	1,595.1	1,611.9	1,647.9	1,647.3	1,677.8	1,711.5	83.3	30.5	33.7	
5	Motor vehicles and parts	480.8	486.3	500.0	489.1	486.3	500.3	438.5	444.5	458.4	447.0	447.9	463.5	12.4	0.9	15.6	
6	Furnishings and durable household equipment	325.2	326.3	328.2	332.9	335.9	338.1	384.7	388.2	393.4	397.8	406.6	413.9	25.7	8.8	7.3	
7	Recreational goods and vehicles	385.5	386.9	389.2	397.9	405.8	405.2	577.2	583.1	598.6	613.8	633.1	632.8	48.0	19.2	-0.2	
8	Other durable goods	219.6	220.6	222.8	223.2	228.6	232.7	217.8	219.0	220.9	219.3	225.1	231.5	5.9	5.8	6.3	
9	Nondurable goods	2,710.4	2,714.2	2,755.7	2,787.6	2,790.6	2,822.1	2,514.3	2,517.9	2,533.2	2,540.2	2,566.6	2,580.1	67.5	26.4	13.6	
10	Food and beverages purchased for off- premises consumption	915.1	915.4	922.3	925.8	930.8	938.9	832.4	835.2	844.1	846.6	846.9	853.7	22.2	0.3	6.8	
11	Clothing and footwear	393.7	395.3	395.3	396.0	399.5	399.6	378.7	380.3	381.6	378.0	387.0	386.5	9.0	9.0	-0.5	
12	Gasoline and other energy goods	273.7	269.5	294.0	306.3	286.5	294.1	289.0	287.3	285.8	281.5	287.1	283.6	3.4	5.6	-3.5	1
13	Other nondurable goods	1,128.0	1,134.0	1,144.1	1,159.6	1,173.7	1,189.5	1,025.9	1,026.6	1,032.9	1,044.8	1,056.7	1,067.0	32.9	11.9	10.3	
14	Services	8,699.3	8,765.0	8,861.0	8,960.7	9,059.8	9,136.4	7,507.3	7,534.9	7,573.8	7,621.0	7,664.4	7,692.9	167.2	43.4	28.5	-
15	Household consumption expenditures (for services)	8,340.4	8,400.8	8,493.5	8,584.9	8,683.1	8,756.9	7,191.1	7,215.2	7,254.6	7,299.2	7,344.1	7,371.3	151.2	44.9	27.2	
16	Housing and utilities	2,331.5	2,352.9	2,369.9	2,387.2	2,425.8	2,444.4	2,025.2	2,035.3	2,030.7	2,028.9	2,045.9	2,046.8	26.5	17.0	0.9	
17	Health care	2,163.7	2,171.9	2,208.0	2,226.6	2,241.9	2,255.9	1,949.1	1,951.7	1,977.9	1,988.1	1,994.6	2,002.2	70.6	6.5	7.6	l '
18 19	Transportation services	392.5	394.6	398.4	403.6 512.9	406.1	408.4 525.1	353.1	354.9 434.0	357.4 436.9	359.1	359.4	361.4	12.5	0.3	2.0	
20	Recreation services Food services and accommodations	492.6 849.2	496.6 854.9	501.5 860.4	870.9	515.7 873.8	881.3	432.4 719.8	723.0	723.1	441.6 727.8	443.1 726.7	447.1 731.8	8.9 17.1	1.5 –1.1	4.0 5.1	
21	Financial services and insurance	984.7	995.4	1,007.1	1,025.9	1,047.1	1,061.7	719.6	729.3	731.8	745.5	750.3	755.5	-11.9	4.8	5.1	
22	Other services	1,126.1	1,134.4	1,148.1	1,157.8	1,172.7	1,180.0	990.2	994.6	1,005.7	1,015.5	1,031.4	1,033.5	32.9	16.0	2.0	
23	Final consumption expenditures of nonprofit institutions serving																
24	households	358.9 1,411.3	364.2 1,420.5	367.5 1,446.1	375.8 1,461.5	376.7 1,458.3	379.5 1,466.0	316.5 1,229.2	320.0 1,233.2	319.5 1,247.9	322.1 1,252.9	320.6 1,243.5	321.9 1,245.5	16.2 39.1	-1.5 -9.4	1.3 2.0	
25	Less: Receipts from sales of goods and services by nonprofit institutions	1,411.3	1,056.3	1,440.1	1,461.5	1,081.6	1,086.6	912.8	913.3	928.5	930.8	923.0	923.7	23.1	- <del>7</del> .9	0.7	
26	Gross private domestic investment	3,057.2	3,048.0	3,126.2	3,128.7	3,178.1	3,241.0	2,858.3	2,847.2	2,905.7	2,897.0	2,924.7	2,967.5	-47.1	27.7	42.9	
27	Fixed investment	3,022.1	3,031.5	3,056.7	3,128.9	3,173.3	3,202.6	2,803.4	2,808.2	2,820.3	2,875.7	2,898.5	2,909.4	20.7	22.8	10.9	
28	Nonresidential	2,316.3	2,329.1	2,333.7	2,383.4	2,433.6	2,465.2	2,210.4	2,224.0	2,224.9	2,263.6	2,300.6	2,322.7	-13.1	37.0	22.1	
29	Structures	516.2	525.6	525.8	548.4	563.0	561.9	446.4	454.6	452.1	468.0	476.0	469.7	-19.1	7.9	-6.3	
30	Equipment	1,043.9	1,040.9	1,044.3	1,057.6	1,082.3	1,105.4	1,047.8	1,043.4	1,048.0	1,059.4	1,082.0	1,104.5	-36.8	22.6	22.5	
31	Information processing equipment	303.9	306.8	307.1	310.8	319.3	329.4	350.2	353.4	355.9	362.9	372.2	383.7	6.3	9.3	11.5	
32	Computers and peripheral equipment	73.1	73.4	72.1	72.8	80.1	86.4	84.0	84.2	83.6	84.3	92.3	99.7	-3.1	8.0	7.4	
33	Other	230.8	233.4	235.0	238.1	239.2	243.0	265.6	268.5	271.7	278.0	279.1	283.2	9.4	1.2	4.1	
34	Industrial equipment	225.0	226.0	229.0	234.3	241.7	245.5	212.1	212.9	215.8	219.9	226.0	229.1	4.8	6.2	3.0	
35	Transportation equipment	286.7	283.3	281.3	282.6	283.5	287.5	277.6	273.3	270.8	268.9	269.6	274.1	-22.0	0.7	4.5	
36	Other equipment	228.3	224.9	226.9	229.9	237.8	243.0	216.9	213.6	215.3	218.2	225.2	229.6	-23.5	6.9	4.4	
37	Intellectual property products	756.2	762.5	763.7	777.4	788.2	797.9	720.4	729.0	728.3	738.6	745.3	753.2	42.6	6.7	7.9	
38	Software	352.8	356.1	359.1	363.2	370.6	375.8	360.4	364.9	366.8	371.1	377.3	383.4	23.8	6.1	6.1	
39	Research and development	320.8	323.6	320.8	329.5	332.2	335.7	281.5	285.2	282.2	287.6	288.4	290.1	17.3	0.9	1.7	
40	Entertainment, literary, and artistic originals	82.6	82.9	83.7	84.7	85.4	86.4	80.4	80.8	81.6	82.0	82.1	82.5	1.7	0.1	0.4	
41	Residential	705.9	702.4	723.0	745.5	739.7	737.4	587.4	579.8	589.8	605.5	594.1	585.0	30.5	-11.4	-9.1	
42	Change in private inventories	35.1	16.5	69.5	-0.1	4.9	38.4	33.4	17.6	63.1	1.2	5.5	35.8	-67.2	4.3	30.3	4
43	Farm	-0.6	0.6	-3.5	2.5	0.3	3.9	-0.6	0.8	-2.9	2.7	1.2	4.1	-0.8	-1.5	2.9	4
44	Nonfarm	35.7	15.9	73.0	-2.7	4.6	34.5	34.5	17.1	66.8	-1.8	4.2	31.7	-68.3	6.0	27.5	4
45	Net exports of goods and services	-521.2	-492.8	-564.3	-582.8	-567.2	-531.7	-586.3	-557.3	-631.1	-622.2	-613.6	-595.5	-41.0	8.6	18.2	4
46	Exports	2,214.6	2,248.4	2,241.5	2,295.6	2,314.9	2,347.7	2,120.1	2,145.3	2,124.4	2,162.3	2,181.1	2,193.7	-7.0	18.9	12.5	4
47	Goods	1,446.0	1,473.0	1,467.2	1,515.0	1,520.9	1,543.1	1,447.5	1,467.2	1,454.5	1,492.3		1,505.6	4.4	8.1	5.2	
48	Services	768.5	775.5	774.3	780.6	794.0	804.6	672.8	678.5	670.6	672.2	682.3	689.2	-10.4	10.1	6.9	
49	Imports	2,735.8	2,741.3	2,805.8	2,878.4	2,882.1	2,879.4	2,706.3	2,702.6	2,755.5			2,789.2	34.0	10.3	-5.6	
50	Goods	2,224.2	2,225.2	2,285.1	2,353.0	2,350.3	2,343.9	2,220.0	2,211.4	2,260.7	2,286.7	2,294.3	2,291.4	18.8	7.5	-2.9	Ę
51	Services	511.6	516.1	520.7	525.5	531.9	535.5	484.0	488.6	492.4	495.5	498.2	495.5	14.8	2.7	-2.6	Ę

<sup>1.</sup> Real gross domestic income is gross domestic income deflated by the implicit price deflator for gross domestic product.

Note: Users are cautioned that particularly for components that exhibit rapid change in prices relative to other prices in the economy, the chained-dollar estimates should not be used to measure the component's relative importance or its contribution to the growth rate of more aggregate series. For accurate estimates of the contributions to percent changes in real gross domestic product, use table 2.

See Explanatory Note at the end of the tables.

Source: U.S. Bureau of Economic Analysis

Table 3. Gross Domestic Product: Level and Change From Preceding Period—Table Ends

				Billions of	of dollars					Billi	ons of chai	ned (2009)	dollars				
Line			S	easonally a	ndjusted at	annual rate	es		S	easonally a	ndjusted at	annual rate	es	Change	from propertion	eceding	Line
		2016	20	116		2017		2016	20	16		2017		2016	20	17	
			Q3	Q4	Q1	Q2	Q3		Q3	Q4	Q1	Q2	Q3		Q2	Q3	
52	Government consumption expenditures and gross investment	3,267.8	3,274.6	3,286.8	3,320.2	3,332.1	3,351.5	2,900.2	2,899.9	2,901.2	2,896.6	2,895.2	2,894.4	21.6	-1.4	-0.9	52
53	Federal	1,231.5	1,234.6	1,235.4	1,244.3	1,255.8	1,263.7	1,114.6	1,116.5	1,115.2	1,108.4	1,113.7	1,116.9	0.5	5.3	3.2	53
54	National defense	728.9	732.3	727.6	730.2	741.4	746.7	667.0	669.6	664.1	658.6	666.2	670.0	-5.0	7.6	3.8	54
55	Consumption expenditures	585.2	589.3	583.2	581.6	584.7	590.1	531.6	534.9	528.3	519.5	520.3	524.1	-5.6	0.8	3.8	55
56	Gross investment	143.7	143.0	144.4	148.6	156.6	156.6	135.1	134.4	135.7	139.1	146.2	146.1	0.7	7.1	-0.1	56
57	Nondefense	502.6	502.3	507.8	514.1	514.5	517.0	447.0	446.4	450.3	449.0	446.9	446.3	5.4	-2.2	-0.5	57
58	Consumption expenditures	379.4	378.9	382.7	386.3	386.1	390.8	333.5	332.7	335.4	332.5	330.3	332.3	3.3	-2.2	2.0	58
59	Gross investment	123.3	123.4	125.1	127.8	128.4	126.2	113.4	113.6	115.0	116.7	116.7	114.1	2.1	0.1	-2.7	59
60	State and local	2,036.3	2,040.0	2,051.4	2,075.9	2,076.2	2,087.8	1,783.6	1,781.6	1,784.1	1,786.2	1,779.6	1,775.7	20.9	-6.5	-3.9	60
61	Consumption expenditures	1,693.6	1,704.4	1,712.2	1,733.4	1,743.7	1,760.3	1,478.2	1,482.9	1,483.4	1,485.1	1,488.8	1,491.9	24.4	3.7	3.1	61
62	Gross investment	342.7	335.6	339.2	342.5	332.5	327.5	304.4	297.6	299.6	300.0	289.6	282.5	-3.6	-10.4	-7.1	62
63	Residual							-101.9	-106.4	-110.1	-113.8	-129.1	-136.7				63
	Addenda:																
64	Gross domestic income (GDI) <sup>1</sup>	18,771.6	18,924.4	18,939.9	19,160.1	19,345.4		16,848.2	16,953.0	16,882.1	16,994.1	17,115.5		144.1	121.4		64
65	Average of GDP and GDI	18,698.1	18,826.7	18,922.7	19,108.9	19,297.7		16,782.2	16,865.6	16,866.8	16,948.7	17,073.3		194.4	124.6		65
66	Final sales of domestic product	18,589.4	18,712.7	18,836.1	19,057.8	19,245.2	19,457.1	16,664.1	16,741.1	16,770.0	16,883.5	17,006.6	17,101.7	309.8	123.2	95.1	66
67	Gross domestic purchases	19,145.7	19,222.0	19,469.9	19,640.5	19,817.2	20,027.2	17,301.6	17,336.7	17,478.6	17,521.6	17,641.8	17,751.5	284.4	120.2	109.7	67
68	Final sales to domestic purchasers	19,110.6	19,205.5	19,400.4	19,640.7	19,812.4	19,988.8	17,250.3	17,300.6	17,397.7	17,502.7	17,618.3	17,697.0	349.9	115.6	78.7	68
69	Final sales to private domestic purchasers	15,842.8	15,930.9	16,113.6	16,320.4	16,480.3	16,637.3	14,362.7	14,413.5	14,509.8	14,619.9	14,737.6	14,817.7	329.3	117.6	80.1	69
70	Gross domestic product	18,624.5	18,729.1	18,905.5	19,057.7	19,250.0	19,495.5	16,716.2	16,778.1	16,851.4	16,903.2	17,031.1	17,156.9	244.6	127.8	125.9	70
71	Plus: Income receipts from the rest of the world	844.3	848.4	882.1	895.9	914.8		697.4	699.5	723.7	731.1	745.1		18.8	13.9		71
72	Less: Income payments to the rest of the world	647.2	660.1	653.1	681.7	712.4		532.2	541.7	533.6	551.9	575.5		26.3	23.6		72
73	Equals: Gross national product	18,821.6	18,917.5	19,134.5	19,272.0	19,452.4		16,879.0	16,932.8	17,041.1	17,081.0	17,198.0		236.2	117.1		73
74	Net domestic product	15,707.8	15,801.5	15,955.6	16,071.5	16,229.3	16,441.9	14,019.2	14,073.7	14,134.7	14,174.8	14,289.9	14,402.3	183.2	115.1	112.4	74

<sup>1.</sup> Real gross domestic income is gross domestic income deflated by the implicit price deflator for gross domestic product.

Note: Users are cautioned that particularly for components that exhibit rapid change in prices relative to other prices in the economy, the chained-dollar estimates should not be used to measure the component's relative importance or its contribution to the growth rate of more aggregate series. For accurate estimates of the contributions to percent changes in real gross domestic product, use table 2.

See Explanatory Note at the end of the tables.

Source: U.S. Bureau of Economic Analysis

Table 4. Price Indexes for Gross Domestic Product and Related Measures: Percent Change From Preceding Period

										Si	easonall	y adjuste	ed at ann	ual rate	S						
Line		2014	2015	2016	2013		20	14			20	15			20	16			2017		Line
					Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
1	Gross domestic product (GDP)	1.8	1.1	1.3	2.1	1.6	2.2	1.9	0.6	-0.1	2.2	1.4	0.8	0.3	2.4	1.4	2.0	2.0	1.0	2.2	1
2	Personal consumption expenditures	1.5	0.3	1.2	1.7	2.1	1.8	1.2	-0.3	-1.6	1.7	1.3	0.2	0.6	2.1	1.7	2.0	2.2	0.3	1.5	2
3	Goods	-0.3	-2.9	-1.4	0.0	0.9	0.1	-0.7	-4.2	-7.6	1.0	-0.5	-3.4	-3.4	0.2	-0.6	1.3	2.7	-3.6	0.7	3
4	Durable goods	-2.3	-2.1	-2.2	-2.1	-2.4	-2.2	-1.9	-3.1	-2.5	-0.9	-2.0	-2.1	-1.3	-2.8	-3.5	-3.2	1.0	-3.6	-2.6	4
5	Nondurable goods	0.7	-3.3	-1.1	1.0	2.6	1.2	-0.2	-4.8	-10.0	2.0	0.2	-4.0	-4.4	1.8	1.0	3.7	3.6	-3.6	2.4	5
6	Services	2.5	1.9	2.5	2.7	2.7	2.7	2.2	1.8	1.5	2.0	2.2	1.9	2.6	3.0	2.9	2.3	2.0	2.2	1.9	6
7	Gross private domestic investment	2.1	0.8	0.5	1.9	2.9	1.2	2.6	2.1	0.0	-0.4	0.7	-0.2	-0.4	1.7	1.0	1.7	1.7	2.6	2.2	7
8	Fixed investment	2.3	1.1	0.6	2.3	3.1	1.2	2.6	2.2	0.8	-0.3	0.9	0.1	-0.2	1.5	1.2	1.6	1.6	2.5	2.2	8
9	Nonresidential	1.3	0.6	-0.3	1.0	1.7	1.2	1.4	1.4	8.0	-0.4	0.3	-0.6	-0.9	0.2	-0.3	0.6	1.5	1.9	1.3	9
10	Structures	4.9	1.8	0.1	4.8	5.7	5.0	5.7	4.8	0.3	-1.5	1.5	-0.4	-2.0	2.8	-0.3	2.3	3.1	3.8	4.6	10
11	Equipment	-0.1	-0.1	-0.1	-1.8	0.1	0.7	0.0	0.2	0.2	-0.7	-0.8	-0.3	0.1	-0.1	0.9	-0.4	0.7	0.8	0.2	11
12	Intellectual property products	1.0	0.9	-0.7	2.7	1.3	-0.8	0.2	0.7	2.3	1.1	1.1	-1.1	-1.5	-1.0	-1.9	1.0	1.6	1.9	0.7	12
13	Residential	6.1	2.7	3.7	7.6	8.7	1.1	7.5	5.3	0.5	0.1	3.3	2.6	2.4	5.9	6.4	4.8	1.7	4.6	5.1	13
14	Change in private inventories																				14
15	Net exports of goods and services																				15
16	Exports	0.0	-5.0	-1.9	-0.3	3.0	-0.1	-1.0	-7.0	-9.6	-1.0	-4.1	-5.9	-5.2	3.8	2.2	2.7	2.5	-0.1	3.4	16
17	Goods	-1.0	-7.1	-3.7	-1.7	3.2	-1.3	-2.5	-9.7	-12.6	-2.1	-6.1	-8.0	-10.2	5.3	2.4	1.9	2.6	-0.6	4.5	17
18	Services	2.1	-0.5	1.7	2.9	2.5	2.6	2.3	-1.1	-3.2	1.1	-0.2	-1.6	5.0	1.1	2.0	4.2	2.3	0.8	1.3	18
19	Imports	-0.3	-7.8	-3.1	0.0	6.4	-3.1	-2.6	-7.7	-14.7	-5.4	-4.9	-8.0	-5.2	1.2	3.0	1.6	6.2	-1.0	0.4	19
20	Goods	-0.7	-9.1	-3.7	-0.9	7.3	-3.9	-3.2	-8.9	-16.7	-6.5	-5.5	-9.3	-6.3	1.2	3.9	1.8	7.4	-1.8	-0.6	20
21	Services	1.7	-1.6	-0.5	4.7	2.1	0.8	0.7	-1.8	-4.1	0.2	-2.4	-1.9	0.0	1.0	-0.7	0.5	1.1	2.7	4.9	21
22	Government consumption expenditures and gross investment	2.0	0.6	0.8	3.7	1.8	1.5	1.9	0.4	-1.5	2.1	0.7	0.9	-1.3	2.6	1.1	1.3	4.8	1.6	2.5	22
23	Federal	1.6	0.6	0.6	6.3	-1.0	1.2	1.2	0.5	0.6	0.3	0.3	-0.1	0.9	1.0	0.5	0.8	5.5	1.8	1.3	23
24	National defense	1.3	0.3	0.4	4.2	0.1	0.9	0.9	0.3	0.4	-0.2	0.1	-0.3	0.6	1.0	0.5	0.7	4.9	1.4	0.6	24
25	Nondefense	2.0	1.0	0.8	9.8	-3.0	1.8	1.7	0.8	0.9	1.1	0.7	0.2	1.4	1.1	0.5	0.8	6.3	2.3	2.4	25
26	State and local	2.2	0.6	0.9	2.0	3.7	1.6	2.4	0.4	-2.8	3.2	1.0	1.5	-2.7	3.6	1.5	1.7	4.4	1.5	3.2	26
	Addenda:																				
27	Final sales of domestic product	1.8	1.1	1.3	2.2	1.6	2.2	1.9	0.6	0.0	2.3	1.4	0.8	0.3	2.4	1.4	2.0	2.0	1.0	2.2	27
28	Gross domestic purchases	1.7	0.4	1.0	2.1	2.2	1.6	1.5	0.2	-1.3	1.4	1.1	0.2	0.1	2.1	1.5	1.8	2.6	0.9	1.8	28
29	Final sales to domestic purchasers	1.7	0.5	1.0	2.2	2.2	1.6	1.5	0.2	-1.2	1.5	1.1	0.3	0.2	2.1	1.6	1.8	2.5	0.9	1.8	29
30	Final sales to private domestic purchasers	1.7	0.4	1.1	1.8	2.3	1.7	1.4	0.2	-1.1	1.3	1.2	0.2	0.5	2.0	1.6	1.9	2.1	0.7	1.6	30
31	Gross national product (GNP)	1.8	1.1	1.3	2.1	1.6	2.2	1.9	0.6	-0.2	2.2	1.4	0.8	0.3	2.4	1.4	2.0	2.0	1.0		31
	Implicit price deflators:																				
32	GDP	1.8	1.1	1.3	2.1	1.7	2.3	1.8	0.6	-0.1	2.2	1.4	0.8	0.2	2.4	1.4	2.0	2.0	1.0	2.1	32
33	Gross domestic purchases	1.7	0.4	1.0	2.1	2.3	1.7	1.5	0.2	-1.3	1.4	1.1	0.3	0.1	2.1	1.5	1.9	2.5	8.0	1.8	33
34	GNP	1.8	1.1	1.3	2.1	1.7	2.3	1.8	0.6	-0.1	2.2	1.4	0.8	0.2	2.4	1.4	2.0	1.9	1.0		34

See *Explanatory Note* at the end of the tables. Source: U.S. Bureau of Economic Analysis

## Table 5. Real Gross Domestic Product, Quantity Indexes [Index numbers, 2009=100]

						Sea	asonally adjus	ted		
Line		2014	2015	2016	20	16		2017		Line
					Q3	Q4	Q1	Q2	Q3	
1	Gross domestic product	111.059	114.237	115.934	116.363	116.872	117.231	118.118	118.991	1
2	Personal consumption expenditures	110.373	114.393	117.520	117.987	118.840	119.408	120.372	121.074	2
3	Goods	117.354	122.789	127.318	127.900	129.387	129.607	131.311	132.670	3
4	Durable goods	137.111	147.737	155.873	157.516	161.032	160.977	163.956	167.250	4
5	Nondurable goods	109.095	112.488	115.593	115.759	116.462	116.783	117.996	118.621	5
6	Services	107.024	110.402	112.917	113.332	113.917	114.628	115.280	115.709	6
7	Gross private domestic investment	147.048	154.695	152.188	151.601	154.715	154.250	155.724	158.006	7
8	Fixed investment	132.166	137.373	138.395	138.627	139.229	141.960	143.085	143.624	8
9	Nonresidential	133.012	136.126	135.323	136.154	136.207	138.581	140.843	142.197	9
10	Structures	108.167	106.212	101.864	103.739	103.173	106.806	108.617	107.189	10
11	Equipment	162.569	168.324	162.618	161.944	162.649	164.423	167.930	171.427	11
12	Intellectual property products	118.545	123.034	130.765	132.331	132.205	134.064	135.283	136.711	12
13	Residential	128.801	141.987	149.766	147.805	150.358	154.371	151.463	149.131	13
14	Change in private inventories									14
15	Exports of goods and services	133.420	133.967	133.527	135.115	133.799	136.187	137.374	138.163	15
16	Imports of goods and services	128.383	134.751	136.463	136.275	138.942	140.407	140.924	140.641	16
17	Government consumption expenditures and gross investment	91.907	93.184	93.884	93.877	93.917	93.770	93.724	93.696	17
18	Federal	91.566	91.493	91.536	91.694	91.583	91.024	91.461	91.722	18
19	State and local	92.068	94.196	95.310	95.199	95.334	95.445	95.097	94.887	19
	Addenda:									
20	Final sales of domestic product	109.382	112.275	114.402	114.930	115.129	115.908	116.753	117.406	20
21	Gross domestic purchases	110.987	114.871	116.791	117.028	117.986	118.276	119.087	119.828	21
22	Final sales to domestic purchasers	109.358	112.957	115.296	115.632	116.281	116.983	117.756	118.282	22
23	Final sales to private domestic purchasers	113.982	118.199	120.973	121.401	122.212	123.140	124.130	124.805	23
24	Gross national product	111.268	114.228	115.849	116.218	116.962	117.236	118.039		24

See *Explanatory Note* at the end of the tables. Source: U.S. Bureau of Economic Analysis

## Table 6. Price Indexes for Gross Domestic Product

[Index numbers, 2009=100]

						Sea	asonally adjust	ed		
Line		2014	2015	2016	201	16		2017		Line
					Q3	Q4	Q1	Q2	Q3	
1	Gross domestic product	108.839	110.012	111.419	111.641	112.190	112.752	113.037	113.646	1
2	Personal consumption expenditures (PCE)	109.157	109.481	110.789	111.034	111.583	112.198	112.273	112.693	2
3	Goods	105.780	102.695	101.209	101.067	101.392	102.062	101.127	101.296	3
4	Durable goods	92.395	90.430	88.460	88.085	87.376	87.587	86.793	86.233	4
5	Nondurable goods	112.689	108.961	107.800	107.802	108.788	109.746	108.735	109.380	5
6	Services	110.929	113.065	115.878	116.332	117.002	117.585	118.213	118.770	6
7	Gross private domestic investment	105.640	106.477	106.978	107.104	107.569	108.014	108.697	109.288	7
8	Fixed investment	106.019	107.148	107.801	107.956	108.385	108.808	109.485	110.082	8
9	Nonresidential	104.399	105.069	104.790	104.726	104.893	105.292	105.780	106.135	9
10	Structures	113.398	115.484	115.637	115.629	116.295	117.183	118.292	119.633	10
11	Equipment	99.906	99.761	99.634	99.763	99.651	99.832	100.032	100.084	11
12	Intellectual property products	104.779	105.753	104.966	104.590	104.844	105.248	105.754	105.928	12
13	Residential	112.854	115.883	120.157	121.144	122.580	123.102	124.503	126.046	13
14	Change in private inventories									14
15	Exports of goods and services	112.051	106.481	104.458	104.813	105.516	106.168	106.136	107.026	15
16	Imports of goods and services	113.240	104.364	101.090	101.439	101.835	103.381	103.134	103.244	16
17	Government consumption expenditures and gross investment	111.199	111.825	112.676	112.919	113.291	114.624	115.088	115.793	17
18	Federal	109.252	109.866	110.488	110.571	110.782	112.266	112.763	113.141	18
19	State and local	112.533	113.168	114.164	114.506	114.979	116.220	116.664	117.574	19
	Addenda:									
20	PCE excluding food and energy <sup>1</sup>	108.021	109.453	111.391	111.710	112.084	112.590	112.847	113.217	20
21	Market-based PCE <sup>2</sup>	108.242	108.186	109.067	109.239	109.756	110.390	110.288	110.632	21
22	Market-based PCE excluding food and energy <sup>2</sup>	106.787	107.934	109.467	109.711	110.024	110.539	110.617	110.892	22
23	Final sales of domestic product	108.892	110.116	111.554	111.781	112.324	112.883	113.166	113.776	
24	Gross domestic purchases	109.101	109.564	110.661	110.887	111.393	112.100	112.340	112.836	24
25	Final sales to domestic purchasers	109.151	109.659	110.785	111.015	111.515	112.219	112.458	112.954	25
26	Final sales to private domestic purchasers	108.641	109.125	110.305	110.533	111.059	111.636	111.830	112.285	26
27	Gross national product	108.955	110.109	111.511	111.734	112.285	112.834	113.118		27
	Implicit price deflators:									
28	Gross domestic product	108.832	110.012	111.416	111.628	112.190	112.746	113.029	113.630	
29	Final sales of domestic product	108.892	110.116	111.554	111.777	112.320	112.879	113.163	113.772	
30	Gross domestic purchases	109.094	109.564	110.659	110.874	111.392	112.094	112.331	112.820	
31	Final sales to domestic purchasers	109.151	109.659	110.785	111.011	111.511	112.215	112.454	112.950	
32	Gross national product	108.948	110.109	111.509	111.721	112.284	112.827	113.108		32

Food excludes personal consumption expenditures for purchased meals and beverages, which are classified in food services.
 This index is a supplemental measure that is based on household expenditures for which there are observable price measures. It excludes most implicit prices (for example, financial services furnished without payment) and the final consumption expenditures of nonprofit institutions serving households. Percentage changes for these series are included in the addenda to table 8 and appendix table A. Source: U.S. Bureau of Economic Analysis

Table 7. Real Gross Domestic Product: Annual Percent Change

Line			P	ercent cl	nange fro	om prece	eding yea	ar			Percen	t change	e fourth	quarter t	o fourth	quarter		Line
LIIIC		2009	2010	2011	2012	2013	2014	2015	2016	2009	2010	2011	2012	2013	2014	2015	2016	
1	Gross domestic product (GDP)	-2.8	2.5	1.6	2.2	1.7	2.6	2.9	1.5	-0.2	2.7	1.7	1.3	2.7	2.7	2.0	1.8	1
2	Personal consumption expenditures (PCE)	-1.6	1.9	2.3	1.5	1.5	2.9	3.6	2.7	-0.2	3.1	1.5	1.3	2.0	3.6	3.0	2.8	2
3	Goods	-3.0	3.4	3.1	2.7	3.1	3.9	4.6	3.7	0.9	5.1	1.7	2.8	3.5	4.7	4.0	4.0	3
4	Durable goods	-5.5	6.1	6.1	7.4	6.2	6.9	7.7	5.5	2.5	9.3	4.8	7.2	5.2	8.7	6.4	7.0	4
5	Nondurable goods	-1.8	2.2	1.8	0.6	1.7	2.5	3.1	2.8	0.2	3.3	0.4	0.8	2.6	2.8	2.8	2.5	5
6	Services	-0.9	1.2	1.8	0.8	0.6	2.4	3.2	2.3	-0.8	2.0	1.4	0.6	1.3	3.0	2.6	2.3	6
7	Gross private domestic investment	-21.6	12.9	5.2	10.6	6.1	5.5	5.2	-1.6	-11.0	11.1	9.6	3.7	9.3	4.7	2.2	0.9	7
8	Fixed investment	-16.7	1.5	6.3	9.8	5.0	6.2	3.9	0.7	-11.9	5.5	8.4	7.0	5.2	6.1	2.4	1.1	8
9	Nonresidential	-15.6	2.5	7.7	9.0	3.5	6.9	2.3	-0.6	-12.2	8.1	9.0	5.2	4.8	6.1	0.3	0.7	9
10	Structures	-18.9	-16.4	2.3	12.9	1.4	10.5	-1.8	-4.1	-27.1	-4.0	8.0	4.1	5.8	8.8	-9.1	3.5	10
11	Equipment	-22.9	15.9	13.6	10.8	4.6	6.6	3.5	-3.4	-11.5	20.9	13.1	6.9	6.1	4.1	3.4	-3.7	11
12	Intellectual property products	-1.4	1.9	3.6	3.9	3.4	4.6	3.8	6.3	1.3	1.8	4.1	3.4	2.2	7.0	3.2	5.2	12
13	Residential	-21.2	-2.5	0.5	13.5	11.9	3.5	10.2	5.5	-10.8	-5.2	6.0	15.7	6.8	6.3	10.3	2.5	13
14	Change in private inventories																	14
15	Net exports of goods and services																	15
16	Exports	-8.8	11.9	6.9	3.4	3.5	4.3	0.4	-0.3	0.8	10.1	4.2	2.2	5.9	3.0	-1.8	0.6	16
17	Goods	-12.1	14.4	6.5	3.6	3.1	4.6	-0.4	0.3	-0.2	10.9	4.8	1.2	7.0	2.7	-3.1	1.8	17
18	Services	-1.1	6.8	7.6	3.0	4.4	3.6	2.1	-1.5	3.2	8.4	2.7	4.5	3.6	3.7	0.9	-1.8	18
19	Imports	-13.7	12.7	5.5	2.2	1.1	4.5	5.0	1.3	-6.2	12.0	3.5	0.3	2.5	6.2	2.9	2.7	19
20	Goods	-15.8	14.9	5.8	2.1	1.2	4.9	5.2	0.9	-6.7	13.6	3.4	0.1	2.7	6.6	2.8	2.5	20
21	Services	-3.8	3.8	4.0	3.0	0.6	2.6	4.0	3.1	-4.2	4.9	3.8	1.2	1.1	3.9	3.5	3.5	21
22	Government consumption expenditures and gross investment	3.2	0.1	-3.0	-1.9	-2.9	-0.6	1.4	0.8	2.3	-1.1	-3.0	-2.2	-2.8	0.5	1.6	0.4	22
23	Federal	5.7	4.4	-2.7	-1.9	-5.8	-2.4	-0.1	0.0	3.9	3.2	-4.0	-2.1	-6.7	-1.2	1.2	-0.3	23
24	National defense	5.4	3.2	-2.3	-3.4	-6.8	-4.0	-2.2	-0.7	3.6	2.0	-4.1	-3.9	-7.1	-4.0	0.0	-1.4	24
25	Nondefense	6.2	6.4	-3.4	0.9	-4.1	0.2	3.2	1.2	4.6	5.5	-3.9	1.0	-6.0	3.5	2.9	1.2	25
26	State and local	1.6	-2.7	-3.3	-1.9	-0.8	0.5	2.3	1.2	1.3	-4.0	-2.3	-2.3	-0.1	1.5	1.9	0.8	26
	Addenda:																	i
27	Gross domestic income (GDI) <sup>1</sup>	-2.6	2.7	2.2	3.3	1.2	3.1	3.0	0.9	0.3	2.6	2.1	2.8	1.3	4.2	1.6	0.5	27
28	Average of GDP and GDI	-2.7	2.6	1.9	2.7	1.5	2.8	2.9	1.2	0.0	2.7	1.9	2.1	2.0	3.5	1.8	1.2	28
29	Final sales of domestic product	-2.0	1.1	1.7	2.1	1.5	2.7	2.6	1.9	-0.4	2.0	1.5	1.7	2.0	2.9	2.0	1.9	29
30	Gross domestic purchases	-3.8	2.9	1.6	2.1	1.3	2.7	3.5	1.7	-1.3	3.2	1.7	1.0	2.2	3.2	2.6	2.1	30
31	Final sales to domestic purchasers	-3.1	1.5	1.7	1.9	1.2	2.7	3.3	2.1	-1.4	2.5	1.5	1.4	1.6	3.4	2.7	2.1	31
32	Final sales to private domestic purchasers	-4.6	1.9	2.9	2.9	2.1	3.5	3.7	2.3	-2.4	3.5	2.6	2.3	2.6	4.1	2.9	2.5	32
33	Gross national product	-2.9	2.8	1.8	2.1	1.7	2.5	2.7	1.4	0.1	2.9	2.0	1.0	2.7	2.5	2.0	1.9	33
34	Real disposable personal income	-0.4	1.0	2.5	3.2	-1.4	3.6	4.2	1.4	-0.7	2.6	1.7	5.1	-2.8	4.9	3.2	0.2	34
	Price indexes:																	1
35	Gross domestic purchases	-0.2	1.5	2.4	1.8	1.4	1.7	0.4	1.0	0.3	1.6	2.4	1.7	1.4	1.4	0.4	1.4	35
36	Gross domestic purchases excluding food and energy <sup>2</sup>	0.5	1.3	1.8	1.8	1.5	1.8	1.1	1.4	0.5	1.4	1.9	1.7	1.7	1.6	1.0	1.5	36
37 38	GDP avaluding food and approve	0.8	1.2 1.4	2.1 1.9	1.8 1.8	1.6 1.7	1.8 1.9	1.1	1.3 1.6	0.4	1.8 1.6	1.9 1.9	1.9 1.8	1.6 1.9	1.6 1.7	1.0 1.2	1.5 1.7	37 38
39	GDP excluding food and energy <sup>2</sup> PCE	-0.1	1.4	2.5	1.8	1.7	1.5	0.3	1.0	1.2	1.3	2.7	1.8	1.9	1.7	0.4	1.7	39
40	PCE excluding food and energy <sup>2</sup>	1.2	1.3	1.5	1.9	1.5	1.6	1.3	1.8	1.4	1.0	1.9	1.8	1.5	1.5	1.3	1.9	40
41	Market-based PCE <sup>3</sup>	0.4	1.5	2.5	1.8	1.0	1.2	-0.1	0.8	1.5	1.1	2.8	1.6	0.9	0.8	0.1	1.3	41
42	Market-based PCE excluding food and energy <sup>3</sup>	1.9	1.0	1.4	1.8	1.2	1.2	1.1	1.4	1.8	0.7	1.9	1.5	1.1	1.2	1.1	1.5	42

1. Gross domestic income deflated by the implicit price deflator for gross domestic product.
2. Food excludes personal consumption expenditures for purchased meals and beverages, which are classified in food services.
3. This index is a supplemental measure that is based on household expenditures for which there are observable price measures. It excludes most implicit prices (for example, financial services furnished without payment) and the final consumption expenditures of nonprofit institutions serving households.

Nore. Estimates under the Percent change from the preceding year columns are calculated from annual data. Estimates under the Percent change fourth quarter columns are calculated from fourth quarter values relative to the same quarter one year prior.

See Explanatory Note at the end of the tables.

Source: U.S. Bureau of Economic Analysis

Table 8. Real Gross Domestic Product: Percent Change From Quarter One Year Ago

Line		2013		20	14			201	15			20	16			2017		Line
Line		Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Line
1	Gross domestic product (GDP)	2.7	1.7	2.7	3.2	2.7	3.8	3.3	2.4	2.0	1.4	1.2	1.5	1.8	2.0	2.2	2.3	1
2	Personal consumption expenditures (PCE)	2.0	2.0	2.7	3.2	3.6	4.0	3.9	3.6	3.0	2.6	2.8	2.8	2.8	2.9	2.7	2.6	2
3	Goods	3.5	2.7	3.9	4.3	4.7	5.1	4.7	4.7	4.0	3.4	3.8	3.5	4.0	3.6	3.5	3.7	3
4	Durable goods	5.2	4.1	6.9	7.8	8.7	9.2	8.1	7.4	6.4	4.7	4.6	5.7	7.0	6.7	6.4	6.2	4
5	Nondurable goods	2.6	1.9	2.5	2.6	2.8	3.2	3.1	3.4	2.8	2.8	3.4	2.4	2.5	2.1	1.9	2.5	5
6	Services	1.3	1.7	2.1	2.6	3.0	3.5	3.5	3.1	2.6	2.1	2.3	2.4	2.3	2.5	2.4	2.1	6
	Gross private domestic investment	9.3	4.3	6.8	6.4	4.7	9.5	5.8	3.5	2.2	-1.9	-2.8	-2.7	0.9	1.7	3.3	4.2	7
8	Fixed investment  Nonresidential	5.2 4.8	4.7 5.3	6.1 7.0	7.7 9.1	6.1 6.1	5.9 4.8	4.5 3.2	3.1 1.1	2.4 0.3	1.3 -1.2	0.5 -1.1	0.1 -0.7	1.1 0.7	3.2 3.5	3.6 4.3	3.6	8
10	Structures	5.8	12.5	13.0	8.1	8.8	3.1	1.3	-2.3	-9.1	-1.2 -8.1	-1.1 -9.0	-2.0	3.5	6.6	8.3	4.4 3.3	10
11	Equipment	6.1	4.1	6.1	12.3	4.1	6.0	3.5	1.4	3.4	-2.1	-2.4	-5.3	-3.7	0.8	3.1	5.9	11
12	Intellectual property products	2.2	2.0	4.1	5.2	7.0	4.4	4.4	3.2	3.2	5.5	7.0	7.4	5.2	5.1	3.3	3.3	12
13	Residential	6.8	2.5	2.7	2.4	6.3	9.9	9.6	11.2	10.3	10.8	6.4	2.6	2.5	2.0	1.3	0.9	13
14	Change in private inventories																	14
15	Net exports of goods and services																	15
16	Exports	5.9	4.3	5.3	4.6	3.0	2.4	1.1	0.0	-1.8	-1.3	-1.6	1.0	0.6	3.1	3.2	2.3	16
17	Goods	7.0	4.7	5.7	5.3	2.7	2.0	0.7	-1.1	-3.1	-0.9	-1.5	1.7	1.8	4.4	4.3	2.6	17
18	Services	3.6	3.3	4.4	3.2	3.7	3.3	2.0	2.1	0.9	-2.2	-1.7	-0.4	-1.8	0.5	1.3	1.6	18
19	Imports	2.5	3.4	4.6	3.9	6.2	6.6	4.9	5.6	2.9	1.2	0.5	0.7	2.7	3.8	4.1	3.2	19
20	Goods	2.7	3.7	5.0	4.2	6.6	7.2	5.2	5.7	2.8	0.7	0.0	0.2	2.5	3.8	4.1	3.6	20
21 22	Services	1.1	1.7	2.6	2.1	3.9	3.9	3.4	5.2	3.5	3.4	2.5	3.1	3.5	3.9	4.2	1.4	21
22	investment	-2.8	-1.9	-1.1	-0.1	0.5	1.0	1.6	1.4	1.6	1.7	0.6	0.4	0.4	-0.2	0.0	-0.2	22
23	Federal	-6.7	-4.1	-3.2	-1.2	-1.2	-0.7	0.1	-0.9	1.2	0.4	-0.3	0.4	-0.3	-0.6	0.1	0.0	23
24	National defense	-7.1	-5.4	-4.5	-2.2	-4.0	-2.9	-2.0	-3.7	0.0	-0.4	-1.4	0.3	-1.4	-1.5	0.1	0.1	24
25	Nondefense	-6.0	-2.0	-1.1	0.5	3.5	2.8	3.5	3.5	2.9	1.6	1.5	0.5	1.2	0.9	0.2	0.0	25
26	State and local	-0.1	-0.3	0.3	0.6	1.5	2.1	2.5	2.8	1.9	2.4	1.1	0.4	0.8	0.0	-0.1	-0.3	26
	Addenda:	4.0	4.7	0.7	0.7	4.0	4.0	2.5	0.4	1.	4.4	0.5		0.5	1.0	2.0		07
27 28	Gross domestic income (GDI) <sup>1</sup>	1.3	1.7 1.7	2.6	3.7	4.2 3.5	4.3	3.5	2.4	1.6 1.8	1.1	0.5	1.4	0.5 1.2	1.3 1.6	2.0		27 28
29	Average of GDP and GDI  Final sales of domestic product	2.0	1.7	2.7	3.4	2.9	3.2	3.4	2.4	2.0	1.2	1.8	2.0	1.2	2.2	2.1	2.2	29
30	Gross domestic purchases	2.0	1.7	2.6	3.1	3.2	4.4	3.8	3.2	2.6	1.7	1.5	1.5	2.1	2.2	2.4	2.4	30
31	Final sales to domestic purchasers	1.6	1.7	2.5	3.3	3.4	3.8	3.6	3.1	2.7	2.2	2.0	1.9	2.1	2.4	2.4	2.3	31
32	Final sales to private domestic purchasers	2.6	2.5	3.3	4.0	4.1	4.4	4.0	3.5	2.9	2.3	2.3	2.2	2.5	2.9	2.9	2.8	32
33	Gross national product	2.7	1.8	2.5	3.1	2.5	3.6	3.0	2.1	2.0	1.1	1.2	1.5	1.9	2.2	2.2		33
34	Real disposable personal income	-2.8	2.5	3.2	3.7	4.9	4.9	4.6	4.0	3.2	2.2	1.7	1.4	0.2	0.9	1.2	1.2	34
	Price indexes:																	
35	Gross domestic purchases	1.4	1.6	1.9	1.9	1.4	0.5	0.5	0.4	0.4	0.7	0.9	1.0	1.4	2.0	1.7	1.8	35
36	Gross domestic purchases excluding food and energy <sup>2</sup>	1.7	1.7	1.8	1.9	1.6	1.3	1.2	1.0	1.0	1.2	1.3	1.4	1.5	1.8	1.7	1.7	36
37	GDP	1.6 1.9	1.7	2.0	1.9	1.6	1.1	1.1	1.0	1.0	1.2	1.2	1.2	1.5	2.0	1.6	1.8	37
38	GDP excluding food and energy <sup>2</sup>	1.9	1.9 1.4	2.0 1.8	2.0	1.7 1.2	1.4	1.3 0.3	1.2 0.3	1.2 0.4	1.4	1.5 1.0	1.6 1.2	1.7 1.6	2.0	1.8	1.7 1.5	38
40	PCE excluding food and energy <sup>2</sup>	1.2	1.4	1.8	1.7	1.5	1.4	1.3	1.3	1.3	1.6	1.7	1.2	1.0	1.8	1.5	1.3	40
41	Market-based PCE <sup>3</sup>	0.9	1.0	1.5	1.3	0.8	-0.1	-0.1	-0.1	0.1	0.6	0.6	0.7	1.3	1.8	1.3	1.3	41
42	Market-based PCE excluding food and energy <sup>3</sup>	1.1	1.0	1.3	1.3	1.2	1.1	1.1	1.0	1.1	1.4	1.4	1.5	1.5	1.5	1.2	1.1	42
- 12		1.1	1.0	1.5	1.5	1.2		1	1.0	11.1	1. 1	1.7	1.5	1.5	1.0	1.2	1	

Gross domestic income deflated by the implicit price deflator for gross domestic product.
 Food excludes personal consumption expenditures for purchased meals and beverages, which are classified in food services.
 This index is a supplemental measure that is based on household expenditures for which there are observable price measures. It excludes most implicit prices (for example, financial services furnished without payment) and the final consumption expenditures of nonprofit institutions serving households.
 See Explanatory Note at the end of the tables.
 Source: U.S. Bureau of Economic Analysis

Table 9. Relation of Gross Domestic Product, Gross National Product, and National Income

[Billions of dollars]

						Seasonally	adjusted at ar	inual rates		
Line		2014	2015	2016	201	16		2017		Line
					Q3	Q4	Q1	Q2	Q3	
1	Gross domestic product (GDP)	17,427.6	18,120.7	18,624.5	18,729.1	18,905.5	19,057.7	19,250.0	19,495.5	1
2	Plus: Income receipts from the rest of the world	847.2	812.9	844.3	848.4	882.1	895.9	914.8		2
3	Less: Income payments to the rest of the world	612.6	608.4	647.2	660.1	653.1	681.7	712.4		3
4	Equals: Gross national product	17,662.1	18,325.2	18,821.6	18,917.5	19,134.5	19,272.0	19,452.4		4
5	Less: Consumption of fixed capital	2,748.0	2,841.5	2,916.7	2,927.6	2,950.0	2,986.2	3,020.7	3,053.6	5
	Less: Statistical discrepancy	-229.9	-255.9	-147.2	-195.2	-34.4	-102.4	-95.4		6
7	Equals: National income	15,144.0	15,739.6	16,052.0	16,185.1	16,218.9	16,388.2	16,527.1		7
8	Compensation of employees	9,256.5	9,708.3	9,978.6	10,081.4	10,014.9	10,166.3	10,271.4	10,373.2	8
9	Wages and salaries	7,476.8	7,858.9	8,085.2	8,178.1	8,107.8	8,232.1	8,321.7	8,408.6	9
10	Supplements to wages and salaries	1,779.7	1,849.4	1,893.4	1,903.4	1,907.1	1,934.2	1,949.7	1,964.6	10
11	Proprietors' income with inventory valuation and capital consumption adjustments	1,315.8	1,318.8	1,341.9	1,346.1	1,354.6	1,380.2	1,378.6	1,381.8	11
12	Rental income of persons with capital consumption adjustment	611.7	662.5	707.3	708.1	718.9	730.8	740.3	745.9	12
13	Corporate profits with inventory valuation and capital consumption adjustments	2,140.6	2,117.5	2,073.5	2,101.2	2,155.2	2,109.0	2,123.4		13
14	Net interest and miscellaneous payments	535.0	583.4	570.6	573.7	566.5	588.2	598.3	602.2	14
15	Taxes on production and imports less subsidies	1,163.6	1,198.5	1,226.2	1,233.5	1,242.5	1,248.2	1,261.2	1,274.7	15
16	Business current transfer payments (net)	138.9	165.0	164.0	151.2	176.6	176.5	164.6	154.9	16
17	Current surplus of government enterprises	-17.9	-14.3	-10.1	-10.1	-10.2	-11.0	-10.7	-10.6	17
	Addenda:									
18	Gross domestic income (GDI)	17,657.5	18,376.6	18,771.6	18,924.4	18,939.9	19,160.1	19,345.4		18
19	Average of GDP and GDI	17,542.6	18,248.7	18,698.1	18,826.7	18,922.7	19,108.9	19,297.7		19
20	Statistical discrepancy as a percentage of GDP	-1.3	-1.4	-0.8	-1.0	-0.2	-0.5	-0.5		20

Source: U.S. Bureau of Economic Analysis

Table 10. Personal Income and Its Disposition

[Billions of dollars]

					Ç	Seasonally a	adjusted at	annual rates	5	
Line		2014	2015	2016	20	16		2017		Line
					Q3	Q4	Q1	Q2	Q3	
1	Personal income <sup>1</sup>	14,818.2	15,553.0	15,928.7	16,028.0	16,025.7	16,245.2	16,364.4	16,478.1	1
2	Compensation of employees	9,256.5	9,708.3	9,978.6	10,081.4	10,014.9	10,166.3	10,271.4	10,373.2	2
3	Wages and salaries	7,476.8	7,858.9	8,085.2	8,178.1	8,107.8	8,232.1	8,321.7	8,408.6	3
4	Supplements to wages and salaries	1,779.7	1,849.4	1,893.4	1,903.4	1,907.1	1,934.2	1,949.7	1,964.6	4
5	Proprietors' income with inventory valuation and capital consumption adjustments	1,315.8	1,318.8	1,341.9	1,346.1	1,354.6	1,380.2	1,378.6	1,381.8	5
6	Farm	68.1	53.7	43.2	41.4	37.8	41.9	37.0	32.3	6
7	Nonfarm	1,247.7	1,265.1	1,298.7	1,304.6	1,316.7	1,338.4	1,341.6	1,349.5	7
8	Rental income of persons with capital consumption adjustment	611.7	662.5	707.3	708.1	718.9	730.8	740.3	745.9	8
9	Personal income receipts on assets	2,245.1	2,387.1	2,377.8	2,373.2	2,391.6	2,420.1	2,434.5	2,435.8	9
10	Personal interest income	1,303.3	1,367.3	1,415.3	1,416.9	1,438.5	1,476.6	1,465.1	1,461.1	10
11	Personal dividend income	941.9	1,019.8	962.5	956.4	953.0	943.5	969.4	974.8	11
12	Personal current transfer receipts	2,544.4	2,684.4	2,768.4	2,777.4	2,795.9	2,831.9	2,836.9	2,852.0	12
13	Less: Contributions for government social insurance, domestic	1,155.3	1,208.0	1,245.3	1,258.2	1,250.2	1,284.1	1,297.4	1,310.7	13
14	Less: Personal current taxes	1,785.6	1,937.9	1,960.1	1,983.8	1,977.2	2,018.8	2,012.9	2,053.0	14
15	Equals: Disposable personal income	13,032.6	13,615.0	13,968.6	14,044.3	14,048.5	14,226.4	14,351.5	14,425.1	15
16	Less: Personal outlays	12,293.8	12,786.7	13,288.0	13,366.6	13,537.0	13,671.8	13,805.9	13,930.3	16
17	Equals: Personal saving	738.8	828.4	680.6	677.7	511.5	554.6	545.6	494.8	17
18	Personal saving as a percentage of disposable personal income	5.7	6.1	4.9	4.8	3.6	3.9	3.8	3.4	18
	Addenda:									
19	Personal income excluding current transfer receipts, billions of chained (2009) dollars <sup>2</sup>	11,244.2	11,754.2	11,878.7	11,934.4	11,857.1	11,955.7	12,049.3	12,092.0	19
20	Disposable personal income, billions of chained (2009) dollars <sup>2</sup>	11,939.3	12,436.0	12,608.2	12,649.2	12,590.8	12,680.4	12,783.3	12,801.0	20

<sup>1.</sup> Personal income is also equal to national income less corporate profits with inventory valuation and capital consumption adjustments, taxes on production and imports less subsidies, contributions for government social insurance, net interest and miscellaneous payments, business current transfer payments (net), and current surplus of government enterprises, plus personal income receipts on assets, and personal current transfer receipts.

2. The current-dollar measure is deflated by the implicit price deflator for personal consumption expenditures. Source: U.S. Bureau of Economic Analysis

## Appendix Table A. Real Gross Domestic Product and Related Aggregates and Price Indexes: Percent Change From Preceding Period and Contributions to Percent Change

		Seasonally adjusted at annual rates																			
Line		2014	2015	2016	2013		20	14			20	15			201	16			2017		Line
					Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
		ļ.		Perce	nt cha	ange f	rom p	rece	ding p	eriod			',	',							
	Gross domestic product (GDP) and related aggregates:																				l
1	GDP	2.6	2.9	1.5	4.0	-0.9	4.6	5.2	2.0	3.2	2.7	1.6	0.5	0.6	2.2	2.8	1.8	1.2	3.1	3.0	1
2	Goods	3.6	3.1	1.4	10.0	-7.8	9.2	10.6	-1.4	2.8	2.5	3.1	-0.7	-2.2	4.1	4.7	3.0	-1.6	7.3	8.7	2
3	Services	1.7	2.6	1.7	1.8	1.9	1.6	3.1	3.1	3.5	1.9	1.4	2.2	0.7	2.4	2.2	1.0	1.5	2.1	1.8	3
4	Structures	5.1	4.0	0.4	-2.6	5.5	11.6	1.4	6.9	3.1	10.3	-1.7	-8.0	10.0	-5.2	0.1	3.4	10.3	-4.3	-7.7	4
5	Motor vehicle output	7.6	5.4	1.6	25.5	5.0	12.6	13.0	-4.7	5.4	10.0	16.7	-17.1	2.8	9.4	2.7	-1.9	-7.3	0.8	-14.4	5
6	GDP excluding motor vehicle output	2.4	2.8	1.5	3.4	-1.1	4.4	5.0	2.2	3.2	2.5	1.2	1.1	0.5	2.0	2.8	1.9	1.5	3.1	3.5	6
7	Final sales of computers 1	11.2	6.3	13.0	12.7	15.7	38.3	0.2	-21.6	11.8	31.5	1.2	8.5	38.9	12.3	-7.9	-7.8	23.3	22.3	-31.0	7
8	GDP excluding final sales of computers	2.5	2.8	1.4	3.9	-1.0	4.5	5.2	2.1	3.2	2.6	1.6	0.5	0.5	2.2	2.8	1.8	1.2	3.0	3.1	8
9	Research and development	0.6	1.2	4.9	-3.7	2.7	-1.0	3.7	10.0	-9.2	4.0	1.8	7.4	3.3	11.2	2.2	-1.1	7.1	1.3	0.3	9
10	GDP excluding research and development	2.6	2.9	1.4	4.2	-1.0	4.8	5.2	1.8	3.6	2.7	1.6	0.3	0.5	2.0	2.8	1.8	1.1	3.1	3.1	10
11	Farm gross value added 2	-1.3	7.8	12.4	-9.2	-21.3	3.9	-1.6	18.2	4.6	-0.2	29.8	-0.7	26.6	14.4	3.5	-3.8	-32.4	-13.9	-3.0	11
12	Nonfarm business gross value added <sup>3</sup>	3.3	3.4	1.5	5.6	-1.4	5.8	6.9	2.3	4.0	3.3	1.3	0.3	0.2	2.5	3.3	2.2	1.8	3.9	3.8	12
	Price indexes:																				
13	GDP	1.8	1.1	1.3	2.1	1.6	2.2	1.9	0.6	-0.1	2.2	1.4	0.8	0.3	2.4	1.4	2.0	2.0	1.0	2.2	13
14	GDP excluding food and energy <sup>4</sup>	1.9	1.3	1.6	2.3	1.8	1.8	1.9	1.2	0.6	1.7	1.5	1.1	1.3	2.2	1.9	1.6	2.4	1.1	1.7	14
15	GDP excluding final sales of computers	1.8	1.1	1.3	2.1	1.6	2.2	1.9	0.6	-0.1	2.2	1.4	0.8	0.3	2.5	1.4	2.0	2.1	1.1	2.2	15
16	Gross domestic purchases	1.7	0.4	1.0	2.1	2.2	1.6	1.5	0.2	-1.3	1.4	1.1	0.2	0.1	2.1	1.5	1.8	2.6	0.9	1.8	16
17	Gross domestic purchases excluding food and energy <sup>4</sup>	1.8	1.1	1.4	2.2	1.8	1.7	1.8	1.2	0.4	1.4	1.3	1.0	1.1	2.0	1.7	1.4	2.3	1.3	1.7	17
18	Gross domestic purchases excluding final sales of computers to domestic purchasers	1.7	0.5	1.0	2.1	2.2	1.7	1.6	0.3	-1.3	1.5	1.1	0.3	0.2	2.2	1.5	1.9	2.6	0.9	1.8	18
19	Personal consumption expenditures (PCE)	1.5	0.3	1.2	1.7	2.1	1.8	1.2	-0.3	-1.6	1.7	1.3	0.2	0.6	2.1	1.7	2.0	2.2	0.3	1.5	19
20	PCE excluding food and energy <sup>4</sup>	1.6	1.3	1.8	1.8	1.5	2.0	1.6	1.1	0.9	1.7	1.5	1.2	2.1	2.0	2.0	1.3	1.8	0.9	1.3	20
21	Market-based PCE <sup>5</sup>	1.2	-0.1	0.8	1.3	1.8	1.3	0.9	-0.8	-2.0	1.6	1.0	-0.2	0.1	1.7	1.4	1.9	2.3	-0.4	1.3	21
22	Market-based PCE excluding food and energy <sup>5</sup>	1.2	1.1	1.4	1.2	1.2	1.5	1.3	0.7	0.7	1.5	1.2	1.0	1.7	1.5	1.6	1.1	1.9	0.3	1.0	22
	C	ontrib	ution	s to p	ercen	t char	ige in	real (	gross	dome	stic p	roduc	:t								
	Percent change at annual rate:																				
23	Gross domestic product	2.6	2.9	1.5	4.0	-0.9	4.6	5.2	2.0	3.2	2.7	1.6	0.5	0.6	2.2	2.8	1.8	1.2	3.1	3.0	23
	Percentage points at annual rates:																				i
24	Goods	1.10	0.93	0.41	3.02	-2.46	2.75	3.18	-0.41	0.85	0.77	0.93	-0.21	-0.64	1.21	1.39	0.88	-0.47	2.10	2.49	24
25	Services	1.08	1.61	1.04	1.14	1.14	0.98	1.92	1.90	2.14	1.18	0.84	1.37	0.46	1.46	1.39	0.61	0.91	1.32	1.15	25
26	Structures	0.39	0.32	0.04	-0.20	0.41	0.86	0.11	0.53	0.25	0.80	-0.15	-0.67	0.76	-0.43	0.01	0.27	0.80	-0.36	-0.64	26
27	Motor vehicle output	0.21	0.15	0.05	0.63	0.14	0.34	0.36	-0.14	0.16	0.28	0.47	-0.56	0.08	0.26	0.08	-0.06	-0.22	0.02	-0.42	27
28	Final sales of computers	0.04	0.02	0.05	0.05	0.06	0.14	0.00	-0.10	0.04	0.11	0.01	0.03	0.13	0.05	-0.03	-0.03	0.08	0.08	-0.14	28
29	Research and development	0.02	0.03	0.12	-0.10	0.07	-0.02	0.09	0.24	-0.24	0.10	0.05	0.18	0.08	0.27	0.06	-0.03	0.18	0.03	0.01	29

<sup>1.</sup> For some components of final sales of computers, includes computer parts.
2. Farm output less intermediate goods and services purchased.
3. Consists of GDP less gross value added of farm, of households and institutions, and of general government.
4. Food excludes personal consumption expenditures for purchased meals and beverages, which are classified in food services.
5. This index is a supplemental measure that is based on household expenditures for which there are observable price measures. It excludes most implicit prices (for example, financial services furnished without payment) and the final consumption expenditures of nonprofit institutions serving households.

See Explanatory Note at the end of the tables.

Source: U.S. Bureau of Economic Analysis

## **Explanatory Note: NIPA Measures of Quantities and Prices**

Current-dollar GDP is a measure of the market value of goods, services, and structures produced in the economy in a particular period. Changes in current-dollar GDP can be decomposed into quantity and price components. Quantities, or "real" measures, and prices are expressed as index numbers with the reference year -- at present, the year 2009 -- equal to 100.

Annual changes in quantities and prices are calculated using a Fisher formula that incorporates weights from two adjacent years. (Quarterly changes in quantities and prices are calculated using a Fisher formula that incorporates weights from two adjacent quarters; quarterly indexes are adjusted for consistency to the annual indexes before percent changes are calculated.) For example, the 2008-09 annual percent change in real GDP uses prices for 2008 and 2009 as weights, and the 2008-09 annual percent change in GDP prices uses quantities for 2008 and 2009 as weights. These annual changes are "chained" (multiplied) together to form time series of quantity and price indexes. Percent changes in Fisher indexes are not affected by the choice of reference year. (BEA also publishes a measure of the price level known as the implicit price deflator (IPD), which is calculated as the ratio of the current-dollar value to the corresponding chained-dollar value, multiplied by 100. The values of the IPD are very close to the values of the corresponding "chain-type" price index.)

Index numbers of quantity and price indexes for GDP and its major components are presented in this release in tables 5 and 6. Percent changes from the preceding period are presented in tables 1, 4, 7, 8, and appendix table A. Contributions by major components to the percent change in real GDP are presented in table 2.

Measures of real GDP and its major components are also presented in dollar-denominated form, designated "chained (2009) dollar estimates." For most series, these estimates, which are presented in table 3, are computed by multiplying the current-dollar value in 2009 by a corresponding quantity index number and then dividing by 100. For example, if a current-dollar GDP component equaled \$100 in 2009 and if real output for this component increased 10 percent in 2010, then the chained (2009) dollar value of this component in 2010 would be  $$110 = $100 \times 110 / 100$ ). Percent changes calculated from chained-dollar estimates and from chain-type quantity indexes are the same; any differences will be small and due to rounding.

Chained-dollar values for the detailed GDP components will not necessarily sum to the chained-dollar estimate of GDP (or to any intermediate aggregate). This is because the relative prices used as weights for any period other than the reference year differ from those of the reference year. A measure of the extent of such differences is provided by a "residual" line, which indicates the difference between GDP (or other major aggregate) and the sum of the most detailed components in the table. For periods close to the reference year, when there usually has not been much change in the relative prices that are used as weights, the residuals tend to be small, and the chained-dollar estimates can be used to approximate the contributions to growth and to aggregate the detailed estimates. For periods further from the reference year, the residuals tend to be larger, and the chained-dollar estimates are less useful for analyses of contributions to growth. Thus, the contributions to percent change shown in table 2 provide a better measure of the composition of GDP growth. In particular, for components for which relative prices are changing rapidly, calculation of contributions using chained-dollar estimates may be misleading even just a few years from the reference year.

Reference "Chained-Dollar Indexes: Issues, Tips on Their Use, and Upcoming Changes," November 2003 Survey, pp. 8-16.



## **News Release**

EMBARGOED UNTIL RELEASE AT 8:30 A.M. EDT, THURSDAY, SEPTEMBER 28, 2017 BEA 17-51

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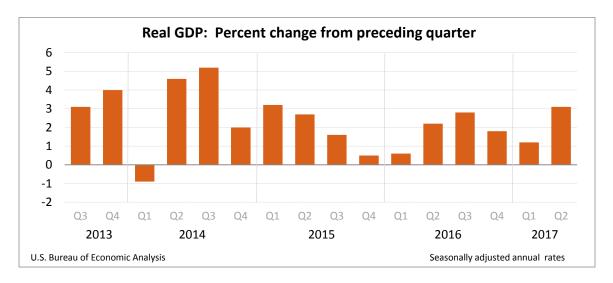
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## Gross Domestic Product: Second Quarter 2017 (Third Estimate) Corporate Profits: Second Quarter 2017 (Revised Estimate)

**Real gross domestic product** (GDP) increased at an annual rate of 3.1 percent in the second quarter of 2017 (table 1), according to the "third" estimate released by the Bureau of Economic Analysis. In the first quarter, real GDP increased 1.2 percent.

The GDP estimate released today is based on more complete source data than were available for the "second" estimate issued last month. In the second estimate, the increase in real GDP was 3.0 percent. With this third estimate for the second quarter, private inventory investment increased more than previously estimated, but the general picture of economic growth remains the same. (see "Updates to GDP" on page 2).



**Real gross domestic income** (GDI) increased 2.9 percent in the second quarter, compared with an increase of 2.7 percent in the first. The **average of real GDP and real GDI**, a supplemental measure of U.S. economic activity that equally weights GDP and GDI, increased 3.0 percent in the second quarter, compared with an increase of 2.0 percent in the first quarter (table 1).



The increase in real GDP in the second quarter primarily reflected positive contributions from PCE, nonresidential fixed investment, exports, federal government spending, and private inventory investment that were partly offset by negative contributions from residential fixed investment and state and local government spending. Imports, which are a subtraction in the calculation of GDP, increased (table 2).

The acceleration in real GDP in the second quarter reflected an upturn in private inventory investment, an acceleration in PCE, a deceleration in imports, and an upturn in federal government spending that were partly offset by a downturn in residential fixed investment, a deceleration in exports, and a downturn in state and local government spending.

**Current-dollar GDP** increased 4.1 percent, or \$192.3 billion, in the second quarter to a level of \$19,250.0 billion. In the first quarter, current-dollar GDP increased 3.3 percent, or \$152.2 billion (table 1 and table 3).

The **price index for gross domestic purchases** increased 0.9 percent in the second quarter, compared with an increase of 2.6 percent in the first quarter (table 4). **The PCE price index** increased 0.3 percent, compared with an increase of 2.2 percent. Excluding food and energy prices, the PCE price index increased 0.9 percent, compared with an increase of 1.8 percent (appendix table A).

### **Updates to GDP**

The revision to the percent change in real GDP primarily reflected an upward revision to private inventory investment. For more information, see the <u>Technical Note</u>. For information on updates to GDP, see the "Additional Information" section that follows.

	Advance Estimate	Second Estimate	Third Estimate
	(Percent o	change from preceding	quarter)
Real GDP	2.6	3.0	3.1
Current-dollar GDP	3.6	4.0	4.1
Real GDI	•••	2.9	2.9
Average of Real GDP and Real GDI	•••	3.0	3.0
Gross domestic purchases price index	0.8	0.8	0.9
PCE price index	0.3	0.3	0.3



## **Corporate Profits (table 12)**

**Profits from current production** (corporate profits with inventory valuation adjustment and capital consumption adjustment) increased \$14.4 billion in the second quarter, in contrast to a decrease of \$46.2 billion in the first quarter.

**Profits of domestic financial corporations** decreased \$33.8 billion in the second quarter, compared with a decrease of \$40.7 billion in the first. **Profits of domestic nonfinancial corporations** increased \$59.1 billion, compared with an increase of \$3.8 billion. **Rest-of-the-world profits** decreased \$10.8 billion, compared with a decrease of \$9.3 billion. In the second quarter, receipts increased \$5.5 billion, and payments increased \$16.3 billion.

\* \* \*

Next release: October 27, 2017 at 8:30 A.M. EDT Gross Domestic Product: Third Quarter 2017 (Advance Estimate)

\* \* \*



## **Additional Information**

#### Resources

Additional resources available at www.bea.gov:

- Stay informed about BEA developments by reading the BEA <u>blog</u>, signing up for BEA's <u>email</u> <u>subscription service</u>, or following BEA on Twitter @BEA News.
- Historical time series for these estimates can be accessed in BEA's interactive data application.
- Access BEA data by registering for BEA's data application programming interface (API).
- For more on BEA's statistics, see our monthly online journal, the <u>Survey of Current Business</u>.
- BEA's news release schedule
- NIPA Handbook: Concepts and Methods of the U.S. National Income and Product Accounts

#### **Definitions**

**Gross domestic product** (GDP) is the value of the goods and services produced by the nation's economy less the value of the goods and services used up in production. GDP is also equal to the sum of personal consumption expenditures, gross private domestic investment, net exports of goods and services, and government consumption expenditures and gross investment.

Gross domestic income (GDI) is the sum of incomes earned and costs incurred in the production of GDP. In national economic accounting, GDP and GDI are conceptually equal. In practice, GDP and GDI differ because they are constructed using largely independent source data. Real GDI is calculated by deflating gross domestic income using the GDP price index as the deflator, and is therefore conceptually equivalent to real GDP.

**Current-dollar estimates** are valued in the prices of the period when the transactions occurred—that is, at "market value." Also referred to as "nominal estimates" or as "current-price estimates."

**Real values** are inflation-adjusted estimates—that is, estimates that exclude the effects of price changes.

The *gross domestic purchases price index* measures the prices of final goods and services purchased by U.S. residents.

The *personal consumption expenditure price index* measures the prices paid for the goods and services purchased by, or on the behalf of, "persons."

Profits from current production, referred to as corporate profits with inventory valuation adjustment (IVA) and capital consumption adjustment (CCAdj) in the NIPAs, is a measure of the net income of corporations before deducting income taxes that is consistent with the value of goods and services measured in GDP. The IVA and CCAdj are adjustments that convert inventory withdrawals and depreciation of fixed assets reported on a tax-return, historical-cost basis to the current-cost economic measures used in the national income and product accounts. Profits for domestic industries reflect profits for all corporations located within the within the geographic borders of the United States. Rest-of-the-world profits are measured as profits earned abroad by U.S. corporations less profits earned in the United States by foreign corporations.

For more definitions, see the <u>Glossary: National Income</u> and Product Accounts.

#### Statistical conventions

**Annual rates.** Quarterly values are expressed at seasonally-adjusted annual rates (SAAR), unless otherwise specified. Dollar changes are calculated as the difference between these SAAR values. For detail, see the FAQ "Why does BEA publish estimates at annual rates?"

**Percent changes** in quarterly series are calculated from unrounded data and are displayed at annual rates, unless otherwise specified. For details, see the FAQ "How is average annual growth calculated?"

**Quantities and prices.** Quantities, or "real" volume measures, and prices are expressed as index numbers with a specified reference year equal to 100 (currently 2009). Quantity and price indexes are calculated using a Fisherchained weighted formula that incorporates weights from two adjacent periods (quarters for quarterly data and annuals for annual data). "Real" dollar series are calculated by multiplying the published quantity index by the current dollar value in the reference year (2009) and then dividing by 100. Percent changes calculated from real quantity indexes and chained-dollar levels are conceptually the same; any differences are due to rounding.

**Chained-dollar values** are not additive because the relative weights for a given period differ from those of the reference year. In tables that display chained-dollar values, a "residual" line shows the difference between the sum of detailed chained-dollar series and its corresponding aggregate.



#### **Updates to GDP**

BEA releases three vintages of the current quarterly estimate for GDP: "Advance" estimates are released near the end of the first month following the end of the quarter and are based on source data that are incomplete or subject to further revision by the source agency; "second" and "third" estimates are released near the end of the second and third months, respectively, and are based on more detailed and more comprehensive data as they become available.

Annual and comprehensive updates are typically released in late July. Annual updates generally cover at least the 3 most recent calendar years (and their associated quarters) and incorporate newly available major annual source data as well as some changes in methods and definitions to improve the accounts. Comprehensive (or benchmark) updates are carried out at about 5-year intervals and incorporate major periodic source data, as well as major conceptual improvements.

The table below shows the average revisions to the quarterly percent changes in real GDP between different estimate vintages, without regard to sign.

	Average Revision
	Without Regard to Sign
Vintage	(percentage points, annual rates)
Advance to second	0.5
Advance to third	0.6
Second to third	0.2
Advance to latest	1.1
Advance to third Second to third	0.6 0.2

Note - Based on estimates from 1993 through 2015. For more information on GDP updates, see <u>Revision Information</u> on the BEA Web site.

The larger average revision from the advance to the latest estimate reflects the fact that periodic comprehensive updates include major statistical and methodological improvements.

Unlike GDP, an advance current quarterly estimate of GDI is not released because data on domestic profits and on net interest of domestic industries are not available. For fourth quarter estimates, these data are not available until the third estimate.

#### **List of GDP News Release Tables**

- Table 1. Real Gross Domestic Product and Related Measures: Percent Change From Preceding Period
- Table 2. Contributions to Percent Change in Real Gross Domestic Product
- Table 3. Gross Domestic Product: Level and Change From Preceding Period
- Table 4. Price Indexes for Gross Domestic Product and Related Measures: Percent Change From Preceding Period
- Table 5. Real Gross Domestic Product, Quantity Indexes
- Table 6. Price Indexes for Gross Domestic Product
- Table 7. Real Gross Domestic Product: Percent Change From Preceding Year
- Table 8. Real Gross Domestic Product: Percent Change From Quarter One Year Ago
- Table 9. Relation of Gross Domestic Product, Gross National Product, and National Income
- Table 10. Personal Income and Its Disposition
- Table 11. Corporate Profits: Level and Percent Change
- Table 12. Corporate Profits by Industry: Level and Change From Preceding Period
- Table 13. Gross Value Added of Nonfinancial Domestic Corporate Business

Appendix Table A. Real Gross Domestic Product and Related Aggregates and Price Indexes: Percent Change From Preceding Period and Contributions to Percent Change

Table 1. Real Gross Domestic Product and Related Measures: Percent Change From Preceding Period

		Seasonally adjusted at annual rates																			
			0045	0047		40				اد	easonan	•		iuai rate	:2						
Line		2014	2015	2016	20			20					15			20			20		Line
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2r	
1	Gross domestic product (GDP)	2.6	2.9	1.5	3.1	4.0	-0.9	4.6	5.2	2.0	3.2	2.7	1.6	0.5	0.6	2.2	2.8	1.8	1.2	3.1	1
2	Personal consumption expenditures	2.9	3.6	2.7	1.9	3.4	1.9	3.5	3.9	5.1	3.7	3.0	2.8	2.7	1.8	3.8	2.8	2.9	1.9	3.3	2
3	Goods	3.9	4.6	3.7	2.9	4.0	2.4	6.2	4.5	5.7	4.2	4.5	4.4	2.8	2.1	6.0	3.2	4.7	0.7	5.4	3
4	Durable goods	6.9	7.7	5.5	4.1	4.9	5.5	13.2	7.7	8.3	7.8	8.6	5.0	4.2	1.0	8.5	9.4	9.2	-0.1	7.6	4
5	Nondurable goods	2.5	3.1	2.8	2.4	3.6	0.9	3.0	3.0	4.5	2.4	2.5	4.0	2.2	2.6	4.7	0.1	2.5	1.1	4.2	5
6	Services	2.4	3.2	2.3	1.3	3.1	1.7	2.1	3.6	4.7	3.4	2.3	2.0	2.6	1.7	2.8	2.7	2.1	2.5	2.3	6
7	Gross private domestic investment	5.5	5.2	-1.6	13.4	5.4	-5.7	15.6	11.5	-1.3	13.1	0.8	2.0	-6.2	-4.0	-2.7	2.4	8.5	-1.2	3.9	7
8	Fixed investment	6.2	3.9	0.7	2.9	6.6	5.1	10.2	9.2	0.3	4.1	4.7	3.4	-2.4	-0.2	1.4	1.5	1.7	8.1	3.2	8
9	Nonresidential	6.9	2.3	-0.6	2.1	9.5	7.2	9.4	10.5	-2.3	2.2	2.9	1.5	-5.1	-4.0	3.3	3.4	0.2	7.2	6.7	9
10	Structures	10.5	-1.8	-4.1	17.1	2.1	21.4	12.2	-1.8	4.7	-2.1	4.6	-15.2	-21.4	2.3	0.5	14.3	-2.2	14.8	7.0	10
11	Equipment	6.6	3.5	-3.4	-5.2	19.5	0.8	10.9	19.2	-11.8	8.2	0.8	10.0	-4.6	-13.1	-0.6	-2.1	1.8	4.4	8.8	11
12	Intellectual property products	4.6	3.8	6.3	3.6	1.1	7.0	5.1	7.7	8.2	-2.9	4.9	2.9	8.0	6.3	11.1	4.2	-0.4	5.7	3.7	12
13	Residential	3.5	10.2	5.5	6.0	-4.5	-2.8	13.2	4.5	10.9	11.4	11.7	10.6	7.3	13.4	-4.7	-4.5	7.1	11.1	-7.3	13
14	Change in private inventories																				14
15	Net exports of goods and services																				15
16	Exports	4.3	0.4	-0.3	3.1	11.8	-2.4	9.2	0.6	4.9	-4.5	3.7	-4.0	-2.3	-2.6	2.8	6.4	-3.8	7.3	3.5	16
17	Goods	4.6	-0.4	0.3	3.5	15.7	-6.0	10.7	2.2	4.6	-8.6	5.4	-4.9	-3.8	0.3	2.8	8.1	-3.4	10.8	2.2	17
18	Services	3.6	2.1	-1.5	2.2	3.7	5.9	5.9	-2.7	5.8	4.6	0.5	-2.1	0.7	-7.8	2.7	3.2	-4.6	1.0	6.2	18
19	Imports	4.5	5.0	1.3	1.7	1.6	5.0	10.2	-1.0	10.8	6.7	3.3	1.7	0.0	-0.2	0.4	2.7	8.1	4.3	1.5	19
20	Goods	4.9	5.2	0.9	1.7	1.6	5.8	11.0	-1.1	11.3	7.9	3.1	0.7	-0.4	-0.5	0.3	1.2	9.2	4.7	1.3	20
21	Services	2.6	4.0	3.1	1.7	1.3	1.2	6.5	-0.5	8.6	1.4	4.4	6.5	1.6	1.1	1.0	9.0	3.2	2.5	2.2	21
22	Government consumption expenditures and gross investment	-0.6	1.4	0.8	-2.0	-2.8	-0.6	1.1	2.1	-0.6	1.5	3.4	1.2	0.3	1.8	-0.9	0.5	0.2	-0.6	-0.2	22
23	Federal	-2.4	-0.1	0.0	-5.1	-5.7	-0.3	-1.6	3.1	-5.6	1.5	1.8	-1.1	2.5	-1.5	-0.9	1.6	-0.5	-2.4	1.9	23
24	National defense	-4.0	-2.2	-0.7	-6.6	-4.2	-5.4	-1.6	2.4	-10.9	-1.0	2.1	-4.5	3.6	-2.7	-2.1	2.5	-3.2	-3.3	4.7	24
25	Nondefense	0.2	3.2	1.2	-2.6	-8.1	8.4	-1.5	4.1	3.3	5.5	1.3	4.2	0.9	0.2	0.8	0.3	3.6	-1.2	-1.9	25
26	State and local	0.5	2.3	1.2	0.1	-1.0	-0.8	2.8	1.5	2.6	1.5	4.5	2.6	-1.1	3.9	-1.0	-0.2	0.6	0.5	-1.5	26
	Addenda:																				
27	Gross domestic income (GDI) <sup>1</sup>	3.1	3.0	0.9	0.8	2.5	1.6	5.7	4.8	4.8	1.9	2.5	0.6	1.5	-0.3	0.2	4.1	-1.7	2.7	2.9	27
28	Average of GDP and GDI	2.8	2.9	1.2	2.0	3.2	0.3	5.2	5.0	3.4	2.6	2.6	1.1	1.0	0.1	1.2	3.4	0.0	2.0	3.0	28
29	Final sales of domestic product	2.7	2.6	1.9	1.5	4.1	0.9	3.7	4.8	2.3	1.8	3.4	1.9	1.2	1.2	2.9	2.6	0.7	2.7	2.9	29
30	Gross domestic purchases	2.7	3.5	1.7	2.9	2.6	0.2	4.9	4.8	3.0	4.8	2.7	2.4	0.7	0.8	1.9	2.4	3.3	1.0	2.8	30
31	Final sales to domestic purchasers	2.7	3.3	2.1	1.3	2.7	2.0	4.1	4.4	3.3	3.4	3.4	2.6	1.4	1.5	2.6	2.2	2.3	2.4	2.7	31
32	Final sales to private domestic	3.5	3.7	2.3	2.1	4.0	2.5	4.7	4.9	4.1	3.7	3.3	2.9	1.7	1.4	3.3	2.6	2.7	3.1	3.3	32
33	purchasers	2.5	2.7	1.4	3.2	3.9	-1.2	4.7	5.5	1.4	3.2	2.1	1.6	1.0	-0.3	2.6	2.6	2.6	0.9	2.8	33
34	Disposable personal income	3.6	4.2	1.4	2.4	0.9	4.3	5.3	4.2	5.9	4.3	3.8	1.8	2.9	0.2	1.9	0.7	-1.8	2.9	3.3	34
34	Current-dollar measures:	3.0	4.2	1.4	2.4	0.7	4.5	3.3	4.2	3.7	4.5	3.0	1.0	2.7	0.2	1.7	0.7	-1.0	2.7	3.3	34
35	GDP	4.4	4.0	2.8	5.1	6.1	0.7	7.0	7.1	2.6	3.2	5.0	3.0	1.3	0.8	4.7	4.2	3.8	3.3	4.1	35
36	GDI	4.9	4.1	2.1	2.8	4.7	3.3	8.1	6.8	5.4	1.9	4.7	2.0	2.4	-0.1	2.6	5.5	0.3	4.7	3.9	36
37	Average of GDP and GDI	4.7	4.0	2.5	3.9	5.4	2.0	7.6	7.0	4.0	2.5	4.8	2.5	1.8	0.4	3.7	4.9	2.1	4.0	4.0	37
38	Final sales of domestic product	4.5	3.8	3.2	3.6	6.4	2.5	6.0	6.8	2.9	1.8	5.7	3.3	2.0	1.6	5.4	4.1	2.7	4.8	4.0	38
39	Gross domestic purchases	4.4	3.9	2.7	4.4	4.7	2.5	6.7	6.4	3.2	3.5	4.1	3.4	1.0	0.9	4.1	3.9	5.3	3.6	3.6	39
40	Final sales to domestic purchasers	4.5	3.8	3.1	3.0	5.0	4.2	5.8	6.0	3.5	2.1	4.9	3.7	1.7	1.7	4.7	3.8	4.1	5.0	3.5	40
41	Final sales to private domestic																				
	purchasers	5.2	4.2	3.5	3.7	5.9	4.9	6.5	6.5	4.3	2.6	4.7	4.1	1.8	1.9	5.4	4.3	4.7	5.2	4.0	41
42	GNP	4.3	3.8	2.7	5.2	6.1	0.4	6.6	7.4	2.0	3.0	4.4	3.0	1.9	-0.1	5.1	4.0	4.7	2.9	3.8	42
43	Disposable personal income	5.1	4.5	2.6	3.9	2.6	6.5	7.1	5.5	5.7	2.6	5.6	3.2	3.1	0.9	4.0	2.5	0.1	5.2	3.6	43
r Re	evised																				

r Revised

1. Gross domestic income deflated by the implicit price deflator for gross domestic product.

See Explanatory Note at the end of the tables.

Source: U.S. Bureau of Economic Analysis

Table 2. Contributions to Percent Change in Real Gross Domestic Product

	Tublo 2.	00111	Seasonally adjusted at annual rates																		
Line		2014	2015	2016	20	13		20	14		asonany	20		iddi rate	3	20	16		20	17	Lino
Line		2014	2013	2010	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2r	Line
	Percent change at annual rate:				Q3	QT	Qi	QZ	25	QT	Qı	QZ	23	QT	Qı	QZ	- 23	QT	Q1	QZ	
1	Gross domestic product	2.6	2.9	1.5	3.1	4.0	-0.9	4.6	5.2	2.0	3.2	2.7	1.6	0.5	0.6	2.2	2.8	1.8	1.2	3.1	1
	Percentage points at annual rates:	2.0	2.7	1.5	5.1	4.0	-0.7	7.0	3.2	2.0	3.2	2.7	1.0	0.5	0.0	2.2	2.0	1.0	1.2	3.1	
	Personal consumption expenditures	1.95	2.47	1.86	1.28	2.29	1.27	2.33	2.65	3.36	2.48	2.03	1.86	1.80	1.23	2.57	1.92	1.99	1.32	2.24	2
3	Goods	0.88	1.03	0.81	0.67	0.90	0.52	1.38	1.01	1.26	0.93	0.99	0.95	0.63	0.46	1.30	0.69	1.03	0.15	1.16	3
5	Durable goods	0.50	0.57 0.17	0.41	0.30	0.36	0.39	0.93	0.56	0.60	0.57	0.63	0.37	0.31	0.08	0.62	0.68	0.67	-0.01 -0.26	0.56	5
6	Furnishings and durable household equipment	0.14	0.14	0.12	0.18	0.08	0.06	0.28	0.13	0.14	0.11	0.13	0.15	0.14	0.09	0.15	0.10	0.09	0.08	0.15	6
7	Recreational goods and vehicles	0.15	0.18	0.18	0.15	0.07	0.09	0.22	0.25	0.20	0.14	0.13	0.17	0.23	0.11	0.25	0.16	0.22	0.21	0.26	7
8	Other durable goods	0.06	0.08	0.03	0.02	0.10	0.05	0.08	0.04	0.09	0.10	0.07	0.06	0.06	-0.03	0.04	0.06	0.04	-0.03	0.12	8
10	Nondurable goods  Food and beverages purchased for off-premises	0.38	0.47	0.40	0.37	0.54	0.13	0.45	0.45	0.67	0.36	0.36	0.58	0.32	0.38	0.68	0.01	0.35	0.16	0.61	9
	consumption	0.07	0.03	0.13	0.10	0.22	0.10	-0.02	0.03	0.03	0.06	-0.02	0.04	0.04	0.16	0.30	0.09	0.21	0.06	0.01	10
11	Clothing and footwear	0.07	0.08	0.05	-0.03	0.04	0.02	0.17	0.08	0.21	0.00	0.07	0.05	0.05	0.02	0.11	0.03	0.03	-0.08	0.20	11
12 13	Gasoline and other energy goods  Other nondurable goods	-0.02 0.26	0.09	0.02	0.03	0.04	-0.11 0.12	-0.13 0.43	0.00	0.16	0.15	0.04	0.11	0.01	0.10	-0.08 0.34	-0.05 -0.06	-0.03 0.15	-0.10 0.28	0.12	12 13
14	Services	1.07	1.44	1.05	0.61	1.39	0.74	0.96	1.64	2.10	1.56	1.04	0.90	1.17	0.77	1.28	1.23	0.97	1.17	1.08	14
15	Household consumption expenditures (for services)	1.09	1.42	0.95	0.67	1.35	0.84	0.87	1.68	2.15	1.71	0.90	0.72	0.93	0.78	1.24	1.08	0.98	1.11	1.11	15
16	Housing and utilities	0.17	0.21	0.16	-0.11	0.34	0.58	-0.28	-0.03	0.50	0.50	-0.10	0.24	-0.01	0.20	0.35	0.27	-0.11	-0.04	0.42	16
17 18	Health care  Transportation services	0.34	0.57	0.43	0.18	0.37	-0.22 0.25	0.65	0.81	0.82	0.60	0.24	0.44	0.31	0.50	0.62	0.13	0.62	0.24	0.15	17 18
19	Recreation services	0.06	0.06	0.06	0.20	0.07	0.13	-0.12	0.12	0.09	0.05	0.08	-0.01	0.20	-0.01	-0.02	0.12	0.07	0.12	0.04	19
20	Food services and accommodations	0.14	0.19	0.11	0.07	0.29	-0.04	0.28	0.22	0.28	0.05	0.29	0.07	0.17	0.02	0.18	0.07	0.00	0.12	-0.03	20
21	Financial services and insurance	0.08	0.15	-0.09	0.03	0.19	-0.06	0.08	0.25	0.13	0.26	0.21	-0.09	0.01	-0.35	-0.12	0.13	0.07	0.40	0.14	21
22 23	Other services  Final consumption expenditures of nonprofit institutions serving households	-0.02	0.15	0.20	-0.06	0.13	-0.10	0.18	-0.04	0.29 -0.06	0.17	0.08	0.02	0.10	-0.01	0.20	0.25	-0.01	0.23	0.38	22
24	Gross output of nonprofit institutions	0.02	0.02	0.10	0.00	0.29	-0.43	0.37	0.36	0.43	0.10	0.05	0.16	0.29	0.20	0.38	0.19	0.36	0.12	-0.23	24
25	Less: Receipts from sales of goods and services																				
26	by nonprofit institutions  Gross private domestic investment	0.12 <b>0.90</b>	0.20 0.87	0.14	0.06 2.08	0.25 <b>0.91</b>	-0.33 - <b>0.93</b>	0.29 2.47	0.40 <b>1.90</b>	0.48	0.25 2.12	-0.09 <b>0.14</b>	-0.03 0.33	0.05 <b>-1.08</b>	0.21 <b>-0.68</b>	0.34 <b>-0.45</b>	0.04	0.38 1.34	0.06 <b>-0.20</b>	-0.19 <b>0.64</b>	25 26
27	Fixed investment	0.97	0.64	0.12	0.48	1.01	0.76	1.56	1.45	0.04	0.67	0.77	0.55	-0.41	-0.05	0.22	0.40	0.28	1.27	0.53	27
28	Nonresidential	0.86	0.30	-0.08	0.29	1.16	0.85	1.16	1.31	-0.30	0.30	0.38	0.19	-0.67	-0.52	0.41	0.42	0.02	0.86	0.82	28
29	Structures	0.30	-0.06	-0.12	0.44	0.06	0.57	0.36	-0.05	0.14	-0.07	0.14	-0.50	-0.69	0.06	0.01	0.37	-0.06	0.39	0.20	29
30 31	Equipment Information processing equipment	0.39	0.21	-0.20 0.03	-0.29 -0.02	1.05 -0.04	0.02	0.61	1.07 -0.07	-0.76 0.14	0.49	0.06	0.58	-0.28 0.04	-0.82 -0.16	-0.04 0.08	-0.12 0.10	0.10	0.24	0.48	30
32	Computers and peripheral equipment	0.07	-0.02	-0.01	0.02	0.08	-0.07	0.23	-0.07	0.14	-0.02	0.08	0.23	-0.10	-0.10	0.06	0.10	-0.01	0.13	0.17	32
33	Other	0.06	0.09	0.05	-0.04	-0.11	0.14	0.16	-0.05	0.12	0.09	0.06	0.18	0.14	-0.14	0.06	0.11	0.06	0.11	0.02	33
34	Industrial equipment	0.05	0.01	0.03	0.06	-0.12	0.15	0.17	0.15	-0.22	0.00	0.12	-0.02	0.09	-0.07	0.08	0.03	0.07	0.09	0.14	34
35 36	Transportation equipment	0.17	0.16 -0.04	-0.12	-0.14 -0.19	0.49	-0.03 -0.17	0.22 -0.03	0.41	-0.25 -0.43	0.50	-0.06 -0.08	0.37	-0.24 -0.17	-0.37 -0.23	0.01	-0.23 -0.03	-0.05 0.04	-0.04	0.02	35
37	Other equipment  Intellectual property products	0.10	0.15	-0.14 0.25	0.14	0.72	0.26	0.19	0.58	0.31	-0.11	0.19	0.00	0.31	0.24	-0.21 0.43	0.17	-0.02	0.06	0.15	36
38	Software	0.14	0.10	0.13	0.14	0.08	0.18	0.21	0.19	0.05	0.11	0.07	0.05	0.12	0.17	0.19	0.12	0.04	0.09	0.13	38
39	Research and development	0.04	0.02	0.11	0.01	-0.04	0.10	-0.01	0.09	0.23	-0.25	0.09	0.04	0.17	0.08	0.25	0.02	-0.07	0.13	0.02	
40	Entertainment, literary, and artistic originals	0.00	0.02	0.01	-0.01 0.18	0.00 -0.15	-0.02 -0.09	-0.01 0.40	0.01	0.03	0.03	0.02	0.03	0.01	0.00	-0.01 -0.18	0.03	0.02	0.01	0.00	40
41	Residential Change in private inventories	-0.07	0.34	-0.40	1.60	-0.15 -0.11	-1.69	0.40	0.14	-0.26	1.45	-0.63	-0.22	-0.68	-0.64	-0.16	0.16		-1.46	0.12	
43	Farm	-0.08	0.03	0.00	0.14	0.06	-0.45	0.04	0.05	-0.03	0.17	-0.06	0.01	-0.09	0.00	0.14	-0.05	-0.09		-0.04	
44	Nonfarm	0.01	0.20	-0.39	1.46	-0.16	-1.25	0.87	0.40	-0.23	1.27	-0.57	-0.23	-0.59	-0.63	-0.81	0.20		-1.59	0.15	
45 46	Net exports of goods and services  Exports	-0.16 0.58	-0.73 0.05	-0.23 -0.04	0.13 0.41	1.29 1.54	-1.14 -0.35	-0.40 1.22	0.28	-1.02 0.65	-1.64 -0.59	-0.03 0.47	-0.77 -0.51	-0.28 -0.29	-0.28 -0.33	0.28	0.36 0.74	-1.61 -0.47	0.22	0.21	
47	Goods	0.38	-0.03	0.02	0.41	1.34	-0.60	0.97	0.07	0.03	-0.78	0.47	-0.43	-0.32	0.01	0.32	0.60	-0.47	0.83	0.42	
48	Services	0.16	0.09	-0.06	0.09	0.16	0.25	0.25	-0.12	0.24	0.19	0.02	-0.09	0.03	-0.33	0.11	0.13	-0.19	0.04	0.25	
49	Imports	-0.74	-0.78	-0.19	-0.28	-0.24	-0.79	-1.62	0.18	-1.67	-1.05	-0.50	-0.25	0.01	0.04	-0.04	-0.37		-0.63	-0.22	
50 51	Goods	-0.67 -0.07	-0.67	-0.11	-0.23	-0.21	-0.76	-1.44	0.17	-1.44	-1.01	-0.38	-0.08	0.06	0.07	-0.02	-0.14		-0.56	-0.16	
52	Services	-0.07	-0.11	-0.09	-0.05	-0.03	-0.03	-0.18	0.02	-0.23	-0.04	-0.12	-0.17	-0.05	-0.03	-0.03	-0.24	-0.09	-0.07	-0.06	51
	investment	-0.12	0.25	0.13	-0.37	-0.53	-0.11	0.20	0.39	-0.11	0.27	0.60	0.21	0.05	0.32	-0.16	0.09		-0.11	-0.03	52
53	Federal	-0.18	-0.01	0.00	-0.39	-0.42	-0.03	<b>-0.11</b>	0.22	-0.40		0.12	-0.07	0.17	-0.10 0.11		0.11	-0.03		0.13	
54 55	National defense  Consumption expenditures	-0.18 -0.13	-0.09 -0.08	-0.03 -0.03	-0.31 -0.36	-0.19 -0.13	-0.25 -0.03	-0.07 -0.15	0.11	-0.48 -0.47	-0.04 0.07	0.08	-0.19 -0.14	0.14	-0.11 -0.09	-0.08 -0.04	0.10	-0.13 -0.16		0.18	
56	Gross investment	-0.05	-0.02	0.00	0.05	-0.06	-0.22	0.08	-0.03	-0.02	-0.11	0.08	-0.04	0.07	-0.01	-0.04	0.00	0.03		0.02	
57	Nondefense	0.01	0.09	0.03	-0.07	-0.23	0.22	-0.04	0.11	0.09	0.15	0.04	0.11	0.02	0.00	0.02	0.01		-0.03	-0.05	
58	Consumption expenditures	0.00	0.07	0.02	-0.06	-0.21	0.19	-0.06	0.10	0.04	0.15	0.02	0.11	0.03	-0.02	0.00	-0.01		-0.07	-0.05	
59 60	Gross investment	0.01 <b>0.06</b>	0.01 0.26	0.01	-0.02 <b>0.01</b>	-0.02 -0.11	0.03 -0.09	0.02 <b>0.31</b>	0.01 <b>0.17</b>	0.04	0.00 0.17	0.01 0.48	0.00	-0.01 -0.12	0.02 <b>0.42</b>	0.02 <b>-0.11</b>	0.01 <b>-0.02</b>	0.03 <b>0.06</b>		0.00 <b>-0.16</b>	
61	Consumption expenditures	0.06	0.20	0.15	0.00	-0.03	0.02	0.31	0.17	0.21	0.17	0.40	0.23	0.12	0.42	0.14	0.17	0.00	0.03	0.09	
62	Gross investment	0.00	0.06	-0.02	0.02	-0.08	-0.10	0.14	0.03	0.08	-0.05	0.28	0.05	-0.23	0.25	-0.24	-0.18	0.05	0.01	-0.25	
	wisod																				

r Revised See *Explanatory Note* at the end of the tables. Source: U.S. Bureau of Economic Analysis

Table 3. Gross Domestic Product: Level and Change From Preceding Period—Continues

							Bill	ions of cha	ined (2009	) dollars							
Line			S	easonally a	adjusted at	annual rate	es		S	easonally a	ndjusted at	annual rate	es	Change	from pre period	eceding	Line
		2016	02	2016	0.4		17	2016		2016	0.4		117	2016	20		
	C dtidt (CDD)	10 (24 5	Q2	Q3	Q4	Q1	Q2r	1/ 71/ 0	Q2	Q3	Q4	Q1	Q2 <sup>r</sup>	244.6	Q1	Q2r	
1	Gross domestic product (GDP)	18,624.5	18,538.0	18,729.1	18,905.5	19,057.7	19,250.0	16,716.2	16,663.5	16,778.1	16,851.4	16,903.2	17,031.1	244.6	51.8	127.8	1
2	Personal consumption expenditures	12,820.7	12,755.0	12,899.4	13,056.9	13,191.6	13,307.0	11,572.1	11,537.7	11,618.1	11,702.1	11,758.0	11,853.0	307.9	55.9	94.9	2
3	Goods	4,121.4	4,108.5	4,134.4	4,195.9	4,230.8	4,247.2	4,072.2	4,059.1	4,090.8	4,138.4	4,145.4	4,199.9	144.9	7.0	54.5	3
5	Durable goods  Motor vehicles and parts	1,411.0 480.8	1,401.1 471.3	1,420.2 486.3	1,440.2 500.0	1,443.2 489.1	1,456.6 486.3	1,595.1 438.5	1,576.2 429.2	1,611.9 444.5	1,647.9 458.4	1,647.3 447.0	1,677.8 447.9	83.3 12.4	-0.6 -11.4	30.5	5
6	Furnishings and durable household	400.0	471.3	400.3	300.0	407.1	400.3	430.3	427.2	444.3	430.4	447.0	447.7	12.4	-11.4	0.7	
	equipment	325.2	325.1	326.3	328.2	332.9	335.9	384.7	382.7	388.2	393.4	397.8	406.6	25.7	4.5	8.8	6
7	Recreational goods and vehicles	385.5	385.3	386.9	389.2	397.9	405.8	577.2	571.9	583.1	598.6	613.8	633.1	48.0	15.2	19.2	7
8	Other durable goods	219.6	219.4	220.6	222.8	223.2	228.6	217.8	216.4	219.0	220.9	219.3	225.1	5.9	-1.6	5.8	8
9 10		2,710.4	2,707.4	2,714.2	2,755.7	2,787.6	2,790.6	2,514.3	2,517.5	2,517.9	2,533.2	2,540.2	2,566.6	67.5	7.0	26.4	9
10	premises consumption	915.1	916.2	915.4	922.3	925.8	930.8	832.4	831.5	835.2	844.1	846.6	846.9	22.2	2.5	0.3	10
11	Clothing and footwear	393.7	394.2	395.3	395.3	396.0	399.5	378.7	378.9	380.3	381.6	378.0	387.0	9.0	-3.6	9.0	11
12	37 3	273.7	270.8	269.5	294.0	306.3	286.5	289.0	289.5	287.3	285.8	281.5	287.1	3.4	-4.3	5.6	12
13	Other nondurable goods	1,128.0	1,126.2	1,134.0	1,144.1	1,159.6	1,173.7	1,025.9	1,029.2	1,026.6	1,032.9	1,044.8	1,056.7	32.9	11.9	11.9	13
14	Services	8,699.3	8,646.5	8,765.0	8,861.0	8,960.7	9,059.8	7,507.3	7,485.7	7,534.9	7,573.8	7,621.0	7,664.4	167.2	47.2	43.4	14
15	Household consumption expenditures (for services)	8,340.4	8,292.3	8,400.8	8,493.5	8,584.9	8,683.1	7,191.1	7,172.0	7,215.2	7,254.6	7,299.2	7,344.1	151.2	44.6	44.9	15
16		2,331.5	2,319.2	2,352.9	2,369.9	2,387.2	2,425.8	2,025.2	2,024.5	2,035.3	2,030.7	2,028.9	2,045.9	26.5	-1.8	17.0	16
17	Health care	2,163.7	2,156.1	2,171.9	2,208.0	2,226.6	2,241.9	1,949.1	1,946.4	1,951.7	1,977.9	1,988.1	1,994.6	70.6	10.2	6.5	17
18		392.5	389.5	394.6	398.4	403.6	406.1	353.1	350.4	354.9	357.4	359.1	359.4	12.5	1.7	0.3	18
19	•	492.6	488.2	496.6	501.5	512.9	515.7	432.4	429.0	434.0	436.9	441.6	443.1	8.9	4.7	1.5	19
20	Food services and accommodations	849.2	847.2	854.9	860.4	870.9	873.8	719.8	720.1	723.0	723.1	727.8	726.7	17.1	4.7	-1.1	20
21	Financial services and insurance	984.7	974.6	995.4	1,007.1	1,025.9	1,047.1	728.7	724.8	729.3	731.8	745.5	750.3	-11.9	13.7	4.8	21
22	Other services	1,126.1	1,117.5	1,134.4	1,148.1	1,157.8	1,172.7	990.2	984.4	994.6	1,005.7	1,015.5	1,031.4	32.9	9.7	16.0	22
23	Final consumption expenditures of nonprofit institutions serving households	358.9	354.2	364.2	367.5	375.8	376.7	316.5	314.0	320.0	319.5	322.1	320.6	16.2	2.6	-1.5	23
24	Gross output of nonprofit institutions	1,411.3	1,402.3	1,420.5	1,446.1	1,461.5	1,458.3	1,229.2	1,225.5	1,233.2	1,247.9	1,252.9	1,243.5	39.1	5.0	-9.4	24
25																	
	services by nonprofit institutions	1,052.5	1,048.1	1,056.3	1,078.6	1,085.7	1,081.6	912.8	911.6	913.3	928.5	930.8	923.0	23.1	2.4	-7.9	25
26	Gross private domestic investment	3,057.2	3,023.1	3,048.0	3,126.2	3,128.7	3,178.1	2,858.3	2,830.2	2,847.2	2,905.7	2,897.0	2,924.7	-47.1	-8.7	27.7	26
27	Fixed investment	3,022.1	3,010.9	3,031.5	3,056.7	3,128.9	3,173.3	2,803.4	2,797.5	2,808.2	2,820.3	2,875.7	2,898.5	20.7	55.3	22.8	27
28		2,316.3	2,311.2	2,329.1	2,333.7	2,383.4	2,433.6	2,210.4	2,205.3	2,224.0	2,224.9	2,263.6	2,300.6	-13.1	38.8	37.0	28
29		516.2	508.7	525.6	525.8	548.4	563.0	446.4	439.7	454.6	452.1	468.0	476.0	-19.1	15.9	7.9	29
30	' '	1,043.9	1,044.3	1,040.9	1,044.3	1,057.6	1,082.3	1,047.8	1,049.0	1,043.4	1,048.0	1,059.4	1,082.0	-36.8	11.4	22.6	30
31 32	Information processing equipment Computers and peripheral	303.9	302.6	306.8	307.1	310.8	319.3	350.2	347.9	353.4	355.9	362.9	372.2	6.3	7.0	9.3	31
	equipment	73.1	73.9		72.1	72.8	80.1	84.0		84.2	83.6	84.3	92.3	-3.1	0.7	8.0	32
33		230.8	228.7	233.4	235.0	238.1	239.2	265.6	262.8	268.5	271.7	278.0	279.1	9.4	6.2	1.2	33
34	• •	225.0	224.4	226.0	229.0	234.3	241.7	212.1	211.7	212.9	215.8	219.9	226.0	4.8	4.1	6.2	34
35 36		286.7 228.3	291.8 225.5	283.3 224.9	281.3 226.9	282.6 229.9	283.5 237.8	277.6 216.9	283.4 214.7	273.3 213.6	270.8 215.3	268.9 218.2	269.6 225.2	-22.0 -23.5	-1.9 2.9	0.7 6.9	35 3 <i>6</i>
37	Intellectual property products	756.2	758.2	762.5	763.7	777.4	788.2	720.4	721.5	729.0	728.3	738.6	745.3	-23.5 42.6	10.2	6.7	37
38		352.8	351.6	356.1	359.1	363.2	370.6	360.4	359.3	364.9	366.8	371.1	377.3	23.8	4.3	6.1	38
39		320.8	324.6	323.6	320.8	329.5	332.2	281.5	284.5	285.2	282.2	287.6	288.4	17.3	5.4	0.9	39
40	Entertainment, literary, and artistic																
	originals	82.6	82.1	82.9	83.7	84.7	85.4	80.4	79.3	80.8	81.6	82.0	82.1	1.7	0.4	0.1	40
41	Residential	705.9	699.7	702.4	723.0	745.5	739.7	587.4	586.5	579.8	589.8	605.5	594.1	30.5	15.7	-11.4	41
42	Change in private inventories	35.1	12.2	16.5	69.5	-0.1	4.9	33.4	12.2	17.6	63.1	1.2	5.5	-67.2	-61.9	4.3	42
43 44	Farm Nonfarm	-0.6 35.7	3.3 8.9	0.6 15.9	-3.5 73.0	2.5 -2.7	0.3 4.6	-0.6 34.5	2.6 9.4	0.8 17.1	-2.9 66.8	2.7 –1.8	1.2 4.2	-0.8 -68.3	5.7 -68.6	-1.5 6.0	43 44
45		-521.2	-501.6	-492.8	-564.3	-582.8	-567.2	-586.3	-572.4	-557.3	-631.1	-622.2	-613.6	-41.0	8.9	8.6	45
46	•	2,214.6	2,201.8	2,248.4	2,241.5	2,295.6	2,314.9	2,120.1	2,112.5	2,145.3	2,124.4	2,162.3	2,181.1	-7.0	37.9	18.9	46
47 48	Goods	1,446.0 768.5	1,436.1 765.7	1,473.0 775.5	1,467.2 774.3	1,515.0 780.6	1,520.9 794.0	1,447.5 672.8	1,439.1 673.3	1,467.2 678.5	1,454.5 670.6	1,492.3 672.2	1,500.4 682.3	4.4 -10.4	37.8 1.6	8.1 10.1	47 48
49	•	2,735.8	2,703.4	2,741.3	2,805.8	2,878.4	2,882.1	2,706.3	2,684.9	2,702.6	2,755.5	2,784.5	2,794.8	34.0	29.1	10.3	49
50 51		2,224.2 511.6	2,197.4 506.0	2,225.2 516.1	2,285.1 520.7	2,353.0 525.5	2,350.3 531.9	2,220.0 484.0	2,204.6 478.2	2,211.4 488.6	2,260.7 492.4	2,286.7 495.5	2,294.3 498.2	18.8 14.8	26.0 3.1	7.5 2.7	50 51
	Services	511.0	500.0	510.1	520.7	525.5	331.9	404.0	4/0.2	400.0	472.4	470.0	470.2	14.0	ა. I	2.1	JI

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1. Real gross domestic income is gross domestic income deflated by the implicit price deflator for gross domestic product.

Nore: Users are cautioned that particularly for components that exhibit rapid change in prices relative to other prices in the economy, the chained-dollar estimates should not be used to measure the component's relative importance or its contribution to the growth rate of more aggregate series. For accurate estimates of the contributions to percent changes in real gross domestic product, use table 2.

See Explanatory Note at the end of the tables.

Source: U.S. Bureau of Economic Analysis

Table 3. Gross Domestic Product: Level and Change From Preceding Period—Table Ends

				Billions				Billi	ons of chai	ned (2009)	dollars						
Line			S	easonally a	adjusted at	annual rate	es .		S	easonally a	ıdjusted at	annual rate	es	Change	from propertion	J	Line
		2016		2016		20	17	2016		2016		20	17	2016	20	17	
			Q2	Q3	Q4	Q1	Q2r		Q2	Q3	Q4	Q1	Q2r	2010	Q1	Q2r	
52	Government consumption expenditures and gross investment	3,267.8	3,261.5	3,274.6	3,286.8	3,320.2	3,332.1	2,900.2	2,896.3	2,899.9	2,901.2	2,896.6	2,895.2	21.6	-4.6	-1.4	52
53	Federal	1,231.5	1,228.2	1,234.6	1,235.4	1,244.3	1,255.8	1,114.6	1,112.1	1,116.5	1,115.2	1,108.4	1,113.7	0.5	-6.8	5.3	53
54	National defense	728.9	726.9	732.3	727.6	730.2	741.4	667.0	665.4	669.6	664.1	658.6	666.2	-5.0	-5.5	7.6	54
55	Consumption expenditures	585.2	583.9	589.3	583.2	581.6	584.7	531.6	530.8	534.9	528.3	519.5	520.3	-5.6	-8.8	0.8	55
56	Gross investment	143.7	143.0	143.0	144.4	148.6	156.6	135.1	134.4	134.4	135.7	139.1	146.2	0.7	3.5	7.1	56
57	Nondefense	502.6	501.3	502.3	507.8	514.1	514.5	447.0	446.1	446.4	450.3	449.0	446.9	5.4	-1.3	-2.2	57
58	Consumption expenditures	379.4	378.6	378.9	382.7	386.3	386.1	333.5	333.0	332.7	335.4	332.5	330.3	3.3	-2.9	-2.2	58
59	Gross investment	123.3	122.8	123.4	125.1	127.8	128.4	113.4	113.0	113.6	115.0	116.7	116.7	2.1	1.7	0.1	59
60	State and local	2,036.3	2,033.3	2,040.0	2,051.4	2,075.9	2,076.2	1,783.6	1,782.3	1,781.6	1,784.1	1,786.2	1,779.6	20.9	2.1	-6.5	60
61	Consumption expenditures	1,693.6	1,689.4	1,704.4	1,712.2	1,733.4	1,743.7	1,478.2	1,476.1	1,482.9	1,483.4	1,485.1	1,488.8	24.4	1.7	3.7	61
62	Gross investment	342.7	343.9	335.6	339.2	342.5	332.5	304.4	305.2	297.6	299.6	300.0	289.6	-3.6	0.4	-10.4	62
63	Residual							-101.9	-99.9	-106.4	-110.1	-113.8	-129.1				63
	Addenda:																
64	Gross domestic income (GDI) <sup>1</sup>	18,771.6	18,670.9	18,924.4	18,939.9	19,160.1	19,345.4	16,848.2	16,783.0	16,953.0	16,882.1	16,994.1	17,115.5	144.1	112.0	121.4	64
65	Average of GDP and GDI	18,698.1	18,604.5	18,826.7	18,922.7	19,108.9	19,297.7	16,782.2	16,723.2	16,865.6	16,866.8	16,948.7	17,073.3	194.4	81.9	124.6	65
66	Final sales of domestic product	18,589.4	18,525.9	18,712.7	18,836.1	19,057.8	19,245.2	16,664.1	16,632.6	16,741.1	16,770.0	16,883.5	17,006.6	309.8	113.5	123.2	66
67	Gross domestic purchases	19,145.7	19,039.6	19,222.0	19,469.9	19,640.5	19,817.2	17,301.6	17,236.2	17,336.7	17,478.6	17,521.6	17,641.8	284.4	42.9	120.2	67
68	Final sales to domestic purchasers	19,110.6	19,027.4	19,205.5	19,400.4	19,640.7	19,812.4	17,250.3	17,206.1	17,300.6	17,397.7	17,502.7	17,618.3	349.9	105.0	115.6	68
69	Final sales to private domestic purchasers	15,842.8	15,765.9	15,930.9	16,113.6	16,320.4	16,480.3	14,362.7	14,322.3	14,413.5	14,509.8	14,619.9	14,737.6	329.3	110.2	117.6	69
70	Gross domestic product	18,624.5	18,538.0	18,729.1	18,905.5	19,057.7	19,250.0	16,716.2	16,663.5	16,778.1	16,851.4	16,903.2	17,031.1	244.6	51.8	127.8	70
71	Plus: Income receipts from the rest of the world	844.3	843.8	848.4	882.1	895.9	914.8	697.4	698.5	699.5	723.7	731.1	745.1	18.8	7.4	13.9	71
72	Less: Income payments to the rest of the world	647.2	648.8	660.1	653.1	681.7	712.4	532.2	534.5	541.7	533.6	551.9	575.5	26.3	18.3	23.6	72
73	Equals: Gross national product	18,821.6	18,733.0	18,917.5	19,134.5	19,272.0	19,452.4	16,879.0	16,825.0	16,932.8	17,041.1	17,081.0	17,198.0	236.2	39.9	117.1	73
74	Net domestic product	15,707.8	15,629.7	15,801.5	15,955.6	16,071.5	16,229.3	14,019.2	13,972.6	14,073.7	14,134.7	14,174.8	14,289.9	183.2	40.1	115.1	74

<sup>1.</sup> Real gross domestic income is gross domestic income deflated by the implicit price deflator for gross domestic product.

Nors: Users are cautioned that particularly for components that exhibit rapid change in prices relative to other prices in the economy, the chained-dollar estimates should not be used to measure the component's relative importance or its contribution to the growth rate of more aggregate series. For accurate estimates of the contributions to percent changes in real gross domestic product, use table 2.

See Explanatory Note at the end of the tables.

Source: U.S. Bureau of Economic Analysis

Table 4. Price Indexes for Gross Domestic Product and Related Measures: Percent Change From Preceding Period

			Seasonally adjusted at annual rates																		
Line		2014	2015	2016	20	13		201	14			201	15			20	16		20	17	Line
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2r	
1	Gross domestic product (GDP)	1.8	1.1	1.3	2.1	2.1	1.6	2.2	1.9	0.6	-0.1	2.2	1.4	0.8	0.3	2.4	1.4	2.0	2.0	1.0	1
2	Personal consumption expenditures	1.5	0.3	1.2	1.5	1.7	2.1	1.8	1.2	-0.3	-1.6	1.7	1.3	0.2	0.6	2.1	1.7	2.0	2.2	0.3	2
3	Goods	-0.3	-2.9	-1.4	0.3	0.0	0.9	0.1	-0.7	-4.2	-7.6	1.0	-0.5	-3.4	-3.4	0.2	-0.6	1.3	2.7	-3.6	3
4	Durable goods	-2.3	-2.1	-2.2	-2.6	-2.1	-2.4	-2.2	-1.9	-3.1	-2.5	-0.9	-2.0	-2.1	-1.3	-2.8	-3.5	-3.2	1.0	-3.6	4
5	Nondurable goods	0.7	-3.3	-1.1	1.8	1.0	2.6	1.2	-0.2	-4.8	-10.0	2.0	0.2	-4.0	-4.4	1.8	1.0	3.7	3.6	-3.6	5
6	Services	2.5	1.9	2.5	2.1	2.7	2.7	2.7	2.2	1.8	1.5	2.0	2.2	1.9	2.6	3.0	2.9	2.3	2.0	2.2	6
7	Gross private domestic investment	2.1	0.8	0.5	1.9	1.9	2.9	1.2	2.6	2.1	0.0	-0.4	0.7	-0.2	-0.4	1.7	1.0	1.7	1.7	2.6	7
8	Fixed investment	2.3	1.1	0.6	2.0	2.3	3.1	1.2	2.6	2.2	8.0	-0.3	0.9	0.1	-0.2	1.5	1.2	1.6	1.6	2.5	8
9	Nonresidential	1.3	0.6	-0.3	1.2	1.0	1.7	1.2	1.4	1.4	0.8	-0.4	0.3	-0.6	-0.9	0.2	-0.3	0.6	1.5	1.9	9
10	Structures	4.9	1.8	0.1	2.7	4.8	5.7	5.0	5.7	4.8	0.3	-1.5	1.5	-0.4	-2.0	2.8	-0.3	2.3	3.1	3.8	10
11	Equipment	-0.1	-0.1	-0.1	0.5	-1.8	0.1	0.7	0.0	0.2	0.2	-0.7	-0.8	-0.3	0.1	-0.1	0.9	-0.4	0.7	8.0	11
12	Intellectual property products	1.0	0.9	-0.7	1.2	2.7	1.3	-0.8	0.2	0.7	2.3	1.1	1.1	-1.1	-1.5	-1.0	-1.9	1.0	1.6	1.9	12
13	Residential	6.1	2.7	3.7	5.4	7.6	8.7	1.1	7.5	5.3	0.5	0.1	3.3	2.6	2.4	5.9	6.4	4.8	1.7	4.6	13
14	Change in private inventories																				14
15	Net exports of goods and services																				15
16	Exports	0.0	-5.0	-1.9	0.7	-0.3	3.0	-0.1	-1.0	-7.0	-9.6	-1.0	-4.1	-5.9	-5.2	3.8	2.2	2.7	2.5	-0.1	16
17	Goods	-1.0	-7.1	-3.7	0.1	-1.7	3.2	-1.3	-2.5	-9.7	-12.6	-2.1	-6.1	-8.0	-10.2	5.3	2.4	1.9	2.6	-0.6	17
18	Services	2.1	-0.5	1.7	1.9	2.9	2.5	2.6	2.3	-1.1	-3.2	1.1	-0.2	-1.6	5.0	1.1	2.0	4.2	2.3	8.0	18
19	Imports	-0.3	-7.8	-3.1	-1.8	0.0	6.4	-3.1	-2.6	-7.7	-14.7	-5.4	-4.9	-8.0	-5.2	1.2	3.0	1.6	6.2	-1.0	19
20	Goods	-0.7	-9.1	-3.7	-2.4	-0.9	7.3	-3.9	-3.2	-8.9	-16.7	-6.5	-5.5	-9.3	-6.3	1.2	3.9	1.8	7.4	-1.8	20
21	Services	1.7	-1.6	-0.5	1.1	4.7	2.1	8.0	0.7	-1.8	-4.1	0.2	-2.4	-1.9	0.0	1.0	-0.7	0.5	1.1	2.7	21
22	Government consumption expenditures and gross investment	2.0	0.6	0.8	1.9	3.7	1.8	1.5	1.9	0.4	-1.5	2.1	0.7	0.9	-1.3	2.6	1.1	1.3	4.8	1.6	22
23	Federal	1.6	0.6	0.6	1.6	6.3	-1.0	1.2	1.2	0.5	0.6	0.3	0.3	-0.1	0.9	1.0	0.5	0.8	5.5	1.8	23
24	National defense	1.3	0.3	0.4	1.3	4.2	0.1	0.9	0.9	0.3	0.4	-0.2	0.1	-0.3	0.6	1.0	0.5	0.7	4.9	1.4	24
25	Nondefense	2.0	1.0	0.8	2.1	9.8	-3.0	1.8	1.7	0.8	0.9	1.1	0.7	0.2	1.4	1.1	0.5	0.8	6.3	2.3	25
26	State and local	2.2	0.6	0.9	2.0	2.0	3.7	1.6	2.4	0.4	-2.8	3.2	1.0	1.5	-2.7	3.6	1.5	1.7	4.4	1.5	26
	Addenda:																				
27	Final sales of domestic product	1.8	1.1	1.3	2.1	2.2	1.6	2.2	1.9	0.6	0.0	2.3	1.4	8.0	0.3	2.4	1.4	2.0	2.0	1.0	27
28	Gross domestic purchases	1.7	0.4	1.0	1.6	2.1	2.2	1.6	1.5	0.2	-1.3	1.4	1.1	0.2	0.1	2.1	1.5	1.8	2.6	0.9	28
29	Final sales to domestic purchasers	1.7	0.5	1.0	1.6	2.2	2.2	1.6	1.5	0.2	-1.2	1.5	1.1	0.3	0.2	2.1	1.6	1.8	2.5	0.9	29
30	Final sales to private domestic purchasers	1.7	0.4	1.1	1.6	1.8	2.3	1.7	1.4	0.2	-1.1	1.3	1.2	0.2	0.5	2.0	1.6	1.9	2.1	0.7	30
31	Gross national product (GNP)	1.8	1.1	1.3	2.1	2.1	1.6	2.2	1.9	0.6	-0.2	2.2	1.4	0.8	0.3	2.4	1.4	2.0	2.0	1.0	31
	Implicit price deflators:																				
32	GDP	1.8	1.1	1.3	1.9	2.1	1.7	2.3	1.8	0.6	-0.1	2.2	1.4	0.8	0.2	2.4	1.4	2.0	2.0	1.0	32
33	Gross domestic purchases	1.7	0.4	1.0	1.5	2.1	2.3	1.7	1.5	0.2	-1.3	1.4	1.1	0.3	0.1	2.1	1.5	1.9	2.5	8.0	33
34	GNP	1.8	1.1	1.3	1.9	2.1	1.7	2.3	1.8	0.6	-0.1	2.2	1.4	8.0	0.2	2.4	1.4	2.0	1.9	1.0	34

r Revised See *Explanatory Note* at the end of the tables. Source: U.S. Bureau of Economic Analysis

# Table 5. Real Gross Domestic Product, Quantity Indexes [Index numbers, 2009=100]

						Se	asonally adjus	ted		
Line		2014	2015	2016		2016		20	17	Line
					Q2	Q3	Q4	Q1	Q2r	
1	Gross domestic product	111.059	114.237	115.934	115.568	116.363	116.872	117.231	118.118	1
2	Personal consumption expenditures	110.373	114.393	117.520	117.170	117.987	118.840	119.408	120.372	2
3	Goods	117.354	122.789	127.318	126.910	127.900	129.387	129.607	131.311	3
4	Durable goods	137.111	147.737	155.873	154.025	157.516	161.032	160.977	163.956	4
5	Nondurable goods	109.095	112.488	115.593	115.742	115.759	116.462	116.783	117.996	5
6	Services	107.024	110.402	112.917	112.593	113.332	113.917	114.628	115.280	6
7	Gross private domestic investment	147.048	154.695	152.188	150.696	151.601	154.715	154.250	155.724	7
8	Fixed investment	132.166	137.373	138.395	138.100	138.627	139.229	141.960	143.085	8
9	Nonresidential	133.012	136.126	135.323	135.011	136.154	136.207	138.581	140.843	9
10	Structures	108.167	106.212	101.864	100.334	103.739	103.173	106.806	108.617	10
11	Equipment	162.569	168.324	162.618	162.810	161.944	162.649	164.423	167.930	11
12	Intellectual property products	118.545	123.034	130.765	130.965	132.331	132.205	134.064	135.283	12
13	Residential	128.801	141.987	149.766	149.535	147.805	150.358	154.371	151.463	13
14	Change in private inventories									14
15	Exports of goods and services	133.420	133.967	133.527	133.051	135.115	133.799	136.187	137.374	15
16	Imports of goods and services	128.383	134.751	136.463	135.384	136.275	138.942	140.407	140.924	16
17	Government consumption expenditures and gross investment	91.907	93.184	93.884	93.760	93.877	93.917	93.770	93.724	17
18	Federal	91.566	91.493	91.536	91.332	91.694	91.583	91.024	91.461	18
19	State and local	92.068	94.196	95.310	95.237	95.199	95.334	95.445	95.097	19
	Addenda:									
20	Final sales of domestic product	109.382	112.275	114.402	114.185	114.930	115.129	115.908	116.753	20
21	Gross domestic purchases	110.987	114.871	116.791	116.349	117.028	117.986	118.276	119.087	21
22	Final sales to domestic purchasers	109.358	112.957	115.296	115.001	115.632	116.281	116.983	117.756	22
23	Final sales to private domestic purchasers	113.982	118.199	120.973	120.633	121.401	122.212	123.140	124.130	23
24	Gross national product	111.268	114.228	115.849	115.479	116.218	116.962	117.236	118.039	24

r Revised See *Explanatory Note* at the end of the tables. Source: U.S. Bureau of Economic Analysis

#### Table 6. Price Indexes for Gross Domestic Product

[Index numbers, 2009=100]

-						Sea	asonally adjust	ted		
Line		2014	2015	2016		2016		20	17	Line
					Q2	Q3	Q4	Q1	Q2r	
1	Gross domestic product	108.839	110.012	111.419	111.257	111.641	112.190	112.752	113.037	1
2	Personal consumption expenditures (PCE)	109.157	109.481	110.789	110.555	111.034	111.583	112.198	112.273	2
3	Goods	105.780	102.695	101.209	101.217	101.067	101.392	102.062	101.127	3
4	Durable goods	92.395	90.430	88.460	88.873	88.085	87.376	87.587	86.793	4
5	Nondurable goods	112.689	108.961	107.800	107.546	107.802	108.788	109.746	108.735	5
6	Services	110.929	113.065	115.878	115.512	116.332	117.002	117.585	118.213	6
7	Gross private domestic investment	105.640	106.477	106.978	106.840	107.104	107.569	108.014	108.697	7
8	Fixed investment	106.019	107.148	107.801	107.632	107.956	108.385	108.808	109.485	8
9	Nonresidential	104.399	105.069	104.790	104.801	104.726	104.893	105.292	105.780	9
10	Structures	113.398	115.484	115.637	115.707	115.629	116.295	117.183	118.292	10
11	Equipment	99.906	99.761	99.634	99.549	99.763	99.651	99.832	100.032	11
12	Intellectual property products	104.779	105.753	104.966	105.082	104.590	104.844	105.248	105.754	12
13	Residential	112.854	115.883	120.157	119.293	121.144	122.580	123.102	124.503	13
14	Change in private inventories									14
15	Exports of goods and services	112.051	106.481	104.458	104.233	104.813	105.516	106.168	106.136	15
16	Imports of goods and services	113.240	104.364	101.090	100.693	101.439	101.835	103.381	103.134	16
17	Government consumption expenditures and gross investment	111.199	111.825	112.676	112.608	112.919	113.291	114.624	115.088	17
18	Federal	109.252	109.866	110.488	110.438	110.571	110.782	112.266	112.763	18
19	State and local	112.533	113.168	114.164	114.083	114.506	114.979	116.220	116.664	19
	Addenda:									
20	PCE excluding food and energy <sup>1</sup>	108.021	109.453	111.391	111.157	111.710	112.084	112.590	112.847	20
21	Market-based PCE <sup>2</sup>	108.242	108.186	109.067	108.862	109.239	109.756	110.390	110.288	21
22	Market-based PCE excluding food and energy <sup>2</sup>	106.787	107.934	109.467	109.266	109.711	110.024	110.539	110.617	22
23	Final sales of domestic product	108.892	110.116	111.554	111.386	111.781	112.324	112.883	113.166	23
24	Gross domestic purchases	109.101	109.564	110.661	110.470	110.887	111.393	112.100	112.340	24
25	Final sales to domestic purchasers	109.151	109.659	110.785	110.588	111.015	111.515	112.219	112.458	
26	Final sales to private domestic purchasers	108.641	109.125	110.305	110.084	110.533	111.059	111.636	111.830	
27	Gross national product	108.955	110.109	111.511	111.348	111.734	112.285	112.834	113.118	27
	Implicit price deflators:									
28		108.832	110.012	111.416	111.249	111.628	112.190	112.746	113.029	
29	Final sales of domestic product	108.892	110.116	111.554	111.383	111.777	112.320	112.879	113.163	
30	Gross domestic purchases	109.094	109.564	110.659	110.463	110.874	111.392	112.094	112.331	30
31	Final sales to domestic purchasers	109.151	109.659	110.785	110.585	111.011	111.511	112.215	112.454	
32	Gross national product	108.948	110.109	111.509	111.340	111.721	112.284	112.827	113.108	32

Revised

1. Food excludes personal consumption expenditures for purchased meals and beverages, which are classified in food services.

2. This index is a supplemental measure that is based on household expenditures for which there are observable price measures. It excludes most implicit prices (for example, financial services furnished without payment) and the final consumption expenditures of nonprofit institutions serving households. Percentage changes for these series are included in the addenda to table 8 and appendix table A. See Explanatory Note at the end of the tables.

Source: U.S. Bureau of Economic Analysis

Table 7. Real Gross Domestic Product: Annual Percent Change

Line			P	ercent cl	nange fro	om prece	eding yea	ar			Percen	t change	e fourth	quarter t	o fourth	quarter		Line
LIIIC		2009	2010	2011	2012	2013	2014	2015	2016	2009	2010	2011	2012	2013	2014	2015	2016	
1	Gross domestic product (GDP)	-2.8	2.5	1.6	2.2	1.7	2.6	2.9	1.5	-0.2	2.7	1.7	1.3	2.7	2.7	2.0	1.8	1
2	Personal consumption expenditures (PCE)	-1.6	1.9	2.3	1.5	1.5	2.9	3.6	2.7	-0.2	3.1	1.5	1.3	2.0	3.6	3.0	2.8	2
3	Goods	-3.0	3.4	3.1	2.7	3.1	3.9	4.6	3.7	0.9	5.1	1.7	2.8	3.5	4.7	4.0	4.0	3
4	Durable goods	-5.5	6.1	6.1	7.4	6.2	6.9	7.7	5.5	2.5	9.3	4.8	7.2	5.2	8.7	6.4	7.0	4
5	Nondurable goods	-1.8	2.2	1.8	0.6	1.7	2.5	3.1	2.8	0.2	3.3	0.4	0.8	2.6	2.8	2.8	2.5	5
6	Services	-0.9	1.2	1.8	0.8	0.6	2.4	3.2	2.3	-0.8	2.0	1.4	0.6	1.3	3.0	2.6	2.3	6
7	Gross private domestic investment	-21.6	12.9	5.2	10.6	6.1	5.5	5.2	-1.6	-11.0	11.1	9.6	3.7	9.3	4.7	2.2	0.9	7
8	Fixed investment	-16.7	1.5	6.3	9.8	5.0	6.2	3.9	0.7	-11.9	5.5	8.4	7.0	5.2	6.1	2.4	1.1	8
9	Nonresidential	-15.6	2.5	7.7	9.0	3.5	6.9	2.3	-0.6	-12.2	8.1	9.0	5.2	4.8	6.1	0.3	0.7	9
10	Structures	-18.9	-16.4	2.3	12.9	1.4	10.5	-1.8	-4.1	-27.1	-4.0	8.0	4.1	5.8	8.8	-9.1	3.5	10
11	Equipment	-22.9	15.9	13.6	10.8	4.6	6.6	3.5	-3.4	-11.5	20.9	13.1	6.9	6.1	4.1	3.4	-3.7	11
12	Intellectual property products	-1.4	1.9	3.6	3.9	3.4	4.6	3.8	6.3	1.3	1.8	4.1	3.4	2.2	7.0	3.2	5.2	12
13	Residential	-21.2	-2.5	0.5	13.5	11.9	3.5	10.2	5.5	-10.8	-5.2	6.0	15.7	6.8	6.3	10.3	2.5	13
14	Change in private inventories																	14
15	Net exports of goods and services																	15
16	Exports	-8.8	11.9	6.9	3.4	3.5	4.3	0.4	-0.3	0.8	10.1	4.2	2.2	5.9	3.0	-1.8	0.6	16
17	Goods	-12.1	14.4	6.5	3.6	3.1	4.6	-0.4	0.3	-0.2	10.9	4.8	1.2	7.0	2.7	-3.1	1.8	17
18	Services	-1.1	6.8	7.6	3.0	4.4	3.6	2.1	-1.5	3.2	8.4	2.7	4.5	3.6	3.7	0.9	-1.8	18
19	Imports	-13.7	12.7	5.5	2.2	1.1	4.5	5.0	1.3	-6.2	12.0	3.5	0.3	2.5	6.2	2.9	2.7	19
20	Goods	-15.8	14.9	5.8	2.1	1.2	4.9	5.2	0.9	-6.7	13.6	3.4	0.1	2.7	6.6	2.8	2.5	20
21	Services	-3.8	3.8	4.0	3.0	0.6	2.6	4.0	3.1	-4.2	4.9	3.8	1.2	1.1	3.9	3.5	3.5	21
22	Government consumption expenditures and gross investment	3.2	0.1	-3.0	-1.9	-2.9	-0.6	1.4	0.8	2.3	-1.1	-3.0	-2.2	-2.8	0.5	1.6	0.4	22
23	Federal	5.7	4.4	-2.7	-1.9	-5.8	-2.4	-0.1	0.0	3.9	3.2	-4.0	-2.1	-6.7	-1.2	1.2	-0.3	23
24	National defense	5.4	3.2	-2.3	-3.4	-6.8	-4.0	-2.2	-0.7	3.6	2.0	-4.1	-3.9	-7.1	-4.0	0.0	-1.4	24
25	Nondefense	6.2	6.4	-3.4	0.9	-4.1	0.2	3.2	1.2	4.6	5.5	-3.9	1.0	-6.0	3.5	2.9	1.2	25
26	State and local	1.6	-2.7	-3.3	-1.9	-0.8	0.5	2.3	1.2	1.3	-4.0	-2.3	-2.3	-0.1	1.5	1.9	0.8	26
	Addenda:																	i
27	Gross domestic income (GDI) 1	-2.6	2.7	2.2	3.3	1.2	3.1	3.0	0.9	0.3	2.6	2.1	2.8	1.3	4.2	1.6	0.5	27
28	Average of GDP and GDI	-2.7	2.6	1.9	2.7	1.5	2.8	2.9	1.2	0.0	2.7	1.9	2.1	2.0	3.5	1.8	1.2	28
29	Final sales of domestic product	-2.0	1.1	1.7	2.1	1.5	2.7	2.6	1.9	-0.4	2.0	1.5	1.7	2.0	2.9	2.0	1.9	29
30	Gross domestic purchases	-3.8	2.9	1.6	2.1	1.3	2.7	3.5	1.7	-1.3	3.2	1.7	1.0	2.2	3.2	2.6	2.1	30
31	Final sales to domestic purchasers	-3.1	1.5	1.7	1.9	1.2	2.7	3.3	2.1	-1.4	2.5	1.5	1.4	1.6	3.4	2.7	2.1	31
32	Final sales to private domestic purchasers	-4.6	1.9	2.9	2.9	2.1	3.5	3.7	2.3	-2.4	3.5	2.6	2.3	2.6	4.1	2.9	2.5	32
33	Gross national product	-2.9	2.8	1.8	2.1	1.7	2.5	2.7	1.4	0.1	2.9	2.0	1.0	2.7	2.5	2.0	1.9	33
34	Real disposable personal income	-0.4	1.0	2.5	3.2	-1.4	3.6	4.2	1.4	-0.7	2.6	1.7	5.1	-2.8	4.9	3.2	0.2	34
	Price indexes:																	1
35	Gross domestic purchases	-0.2	1.5	2.4	1.8	1.4	1.7	0.4	1.0	0.3	1.6	2.4	1.7	1.4	1.4	0.4	1.4	35
36	Gross domestic purchases excluding food and energy <sup>2</sup>	0.5	1.3	1.8	1.8	1.5	1.8	1.1	1.4	0.5	1.4	1.9	1.7	1.7	1.6	1.0	1.5	36
37	CDD excluding feed and energy?	0.8	1.2 1.4	2.1 1.9	1.8 1.8	1.6 1.7	1.8 1.9	1.1	1.3 1.6	0.4	1.8	1.9 1.9	1.9 1.8	1.6 1.9	1.6 1.7	1.0 1.2		37 38
38 39	GDP excluding food and energy <sup>2</sup> PCE	-0.1	1.4	2.5	1.8	1.7	1.9	0.3	1.6	1.2	1.6 1.3	2.7	1.8	1.9	1.7	0.4	1.7 1.6	38
40	PCE excluding food and energy <sup>2</sup>	1.2	1.7	1.5	1.9	1.5	1.6	1.3	1.8	1.4	1.0	1.9	1.8	1.5	1.5	1.3	1.9	40
41	Market-based PCE <sup>3</sup>	0.4	1.5	2.5	1.8	1.0	1.2	-0.1	0.8	1.5	1.1	2.8	1.6	0.9	0.8	0.1	1.3	41
42	Market-based PCE excluding food and energy <sup>3</sup>	1.9	1.0	1.4	1.8	1.2	1.2	1.1	1.4	1.8	0.7	1.9	1.5	1.1	1.2	1.1	1.5	42

1. Gross domestic income deflated by the implicit price deflator for gross domestic product.
2. Food excludes personal consumption expenditures for purchased meals and beverages, which are classified in food services.
3. This index is a supplemental measure that is based on household expenditures for which there are observable price measures. It excludes most implicit prices (for example, financial services furnished without payment) and the final consumption expenditures of nonprofit institutions serving households.

Nore. Estimates under the *Percent change from the preceding year* columns are calculated from annual data. Estimates under the *Percent change fourth quarter* columns are calculated from fourth quarter values relative to the same quarter one year prior.

See *Explanatory Note* at the end of the tables.
Source: U.S. Bureau of Economic Analysis

Table 8. Real Gross Domestic Product: Percent Change From Quarter One Year Ago

Line		20	13		20	14			20	15			20	16		20	17	Line
LIIIC		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2r	LINE
1	Gross domestic product (GDP)	1.7	2.7	1.7	2.7	3.2	2.7	3.8	3.3	2.4	2.0	1.4	1.2	1.5	1.8	2.0	2.2	1
2	Personal consumption expenditures (PCE)	1.4	2.0	2.0	2.7	3.2	3.6	4.0	3.9	3.6	3.0	2.6	2.8	2.8	2.8	2.9	2.7	2
3	Goods	3.0	3.5	2.7	3.9	4.3	4.7	5.1	4.7	4.7	4.0	3.4	3.8	3.5	4.0	3.6	3.5	3
4	Durable goods	6.0	5.2	4.1	6.9	7.8	8.7	9.2	8.1	7.4	6.4	4.7	4.6	5.7	7.0	6.7	6.4	4
5	Nondurable goods	1.7	2.6	1.9	2.5	2.6	2.8	3.2	3.1	3.4	2.8	2.8	3.4	2.4	2.5	2.1	1.9	Ę
6	Services	0.6	1.3	1.7	2.1	2.6	3.0	3.5	3.5	3.1	2.6	2.1	2.3	2.4	2.3	2.5	2.4	(
7	Gross private domestic investment	7.0	9.3	4.3	6.8	6.4	4.7	9.5	5.8	3.5	2.2	-1.9	-2.8	-2.7	0.9	1.7	3.3	
8	Fixed investment	5.3	5.2	4.7	6.1	7.7	6.1	5.9	4.5	3.1	2.4	1.3	0.5	0.1	1.1	3.2	3.6	
9	Nonresidential	3.4	4.8	5.3	7.0	9.1	6.1	4.8	3.2	1.1	0.3	-1.2	-1.1	-0.7	0.7	3.5	4.3	-
10	Structures	3.2	5.8	12.5	13.0	8.1	8.8	3.1	1.3	-2.3	-9.1	-8.1	-9.0	-2.0	3.5	6.6	8.3	10
11	Equipment	3.3	6.1	4.1	6.1	12.3	4.1	6.0	3.5	1.4	3.4	-2.1	-2.4	-5.3	-3.7	0.8	3.1	1
12	Intellectual property products	3.6	2.2	2.0	4.1	5.2	7.0	4.4	4.4	3.2	3.2	5.5	7.0	7.4	5.2	5.1	3.3	1:
13	Residential	13.6	6.8	2.5	2.7	2.4	6.3	9.9	9.6	11.2	10.3	10.8	6.4	2.6	2.5	2.0	1.3	1
14	Change in private inventories																	1
15	Net exports of goods and services																	1
16	Exports	2.9	5.9	4.3	5.3	4.6	3.0	2.4	1.1	0.0	-1.8	-1.3	-1.6	1.0	0.6	3.1	3.2	1
17	Goods	2.2	7.0	4.7	5.7	5.3	2.7	2.0	0.7	-1.1	-3.1	-0.9	-1.5	1.7	1.8	4.4	4.3	1
18	Services	4.5	3.6	3.3	4.4	3.2	3.7	3.3	2.0	2.1	0.9	-2.2	-1.7	-0.4	-1.8	0.5	1.3	1
19	Imports	1.1	2.5	3.4	4.6	3.9	6.2	6.6	4.9	5.6	2.9	1.2	0.5	0.7	2.7	3.8	4.1	1
20	Goods	1.2	2.7	3.7	5.0	4.2	6.6	7.2	5.2	5.7	2.8	0.7	0.0	0.2	2.5	3.8	4.1	2
21	Services	0.6	1.1	1.7	2.6	2.1	3.9	3.9	3.4	5.2	3.5	3.4	2.5	3.1	3.5	3.9	4.2	2
22	Government consumption expenditures and gross investment	-3.0	-2.8	-1.9	-1.1	-0.1	0.5	1.0	1.6	1.4	1.6	1.7	0.6	0.4	0.4	-0.2	0.0	2:
23	Federal	-6.6	-2.o -6.7	-1.9 -4.1	-3.2	-1.2	-1.2	-0.7	0.1	-0.9	1.0	0.4	-0.3	0.4	-0.3	-0.2	0.0	2:
24	National defense	-8.0	-0.7 -7.1	-5.4	-3.2 -4.5	-2.2	-4.0	-2.9	-2.0	-3.7	0.0	-0.4	-1.4	0.4	-0.3	-1.5	0.1	2
25	Nondefense	-4.3	-6.0	-2.0	-1.1	0.5	3.5	2.8	3.5	3.5	2.9	1.6	1.5	0.5	1.2	0.9	0.1	2
26	State and local	-0.5	-0.1	-0.3	0.3	0.6	1.5	2.1	2.5	2.8	1.9	2.4	1.1	0.4	0.8	0.0	-0.1	2
	Addenda:	0.0	0.1	0.0	0.0	0.0	1.0	2.1	2.0	2.0	1.7	2.1		0.1	0.0	0.0	0.1	_
27	Gross domestic income (GDI) 1	1.5	1.3	1.7	2.6	3.7	4.2	4.3	3.5	2.4	1.6	1.1	0.5	1.4	0.5	1.3	2.0	2
28	Average of GDP and GDI	1.6	2.0	1.7	2.7	3.4	3.5	4.0	3.4	2.4	1.8	1.2	0.9	1.4	1.2	1.6	2.1	2
29	Final sales of domestic product	1.4	2.0	1.8	2.5	3.4	2.9	3.2	3.1	2.3	2.0	1.9	1.8	2.0	1.9	2.2	2.2	2
30	Gross domestic purchases	1.4	2.2	1.7	2.6	3.1	3.2	4.4	3.8	3.2	2.6	1.7	1.5	1.5	2.1	2.1	2.4	3
31	Final sales to domestic purchasers	1.1	1.6	1.7	2.5	3.3	3.4	3.8	3.6	3.1	2.7	2.2	2.0	1.9	2.1	2.4	2.4	3
32	Final sales to private domestic purchasers	2.1	2.6	2.5	3.3	4.0	4.1	4.4	4.0	3.5	2.9	2.3	2.3	2.2	2.5	2.9	2.9	3
33	Gross national product	1.7	2.7	1.8	2.5	3.1	2.5	3.6	3.0	2.1	2.0	1.1	1.2	1.5	1.9	2.2	2.2	3
34	Real disposable personal income	-0.5	-2.8	2.5	3.2	3.7	4.9	4.9	4.6	4.0	3.2	2.2	1.7	1.4	0.2	0.9	1.2	3
	Price indexes:																	
35	Gross domestic purchases	1.4	1.4	1.6	1.9	1.9	1.4	0.5	0.5	0.4	0.4	0.7	0.9	1.0	1.4	2.0	1.7	3
36	Gross domestic purchases excluding food and energy $^2$	1.5	1.7	1.7	1.8	1.9	1.6	1.3	1.2	1.0	1.0	1.2	1.3	1.4	1.5	1.8	1.7	3
37	GDP	1.5	1.6	1.7	2.0	1.9	1.6	1.1	1.1	1.0	1.0	1.2	1.2	1.2	1.5	2.0	1.6	3
38	GDP excluding food and energy <sup>2</sup>	1.7	1.9	1.9	2.0	2.0	1.7	1.4	1.3	1.2	1.2	1.4	1.5	1.6	1.7	2.0	1.8	3
39	PCE	1.3	1.2	1.4	1.8	1.7	1.2	0.3	0.3	0.3	0.4	1.0	1.0	1.2	1.6	2.0	1.6	3
40	PCE excluding food and energy <sup>2</sup>	1.5	1.5	1.5	1.7	1.7	1.5	1.4	1.3	1.3	1.3	1.6	1.7	1.8	1.9	1.8	1.5	40
41	Market-based PCE <sup>3</sup>	1.0	0.9	1.0	1.5	1.3	0.8	-0.1	-0.1	-0.1	0.1	0.6	0.6	0.7	1.3	1.8	1.3	4
42	Market-based PCE excluding food and energy <sup>3</sup>	1.1	1.1	1.0	1.3	1.3	1.2	1.1	1.1	1.0	1.1	1.4	1.4	1.5	1.5	1.5	1.2	4

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1. Gross domestic income deflated by the implicit price deflator for gross domestic product.
2. Food excludes personal consumption expenditures for purchased meals and beverages, which are classified in food services.
3. This index is a supplemental measure that is based on household expenditures for which there are observable price measures. It excludes most implicit prices (for example, financial services furnished without payment) and the final consumption expenditures of nonprofit institutions serving households.
See Explanatory Note at the end of the tables.
Source: U.S. Bureau of Economic Analysis

Table 9. Relation of Gross Domestic Product, Gross National Product, and National Income

[Billions of dollars]

						Seasonally	adjusted at ar	nual rates		
Line		2014	2015	2016		2016		201	17	Line
					Q2	Q3	Q4	Q1	Q2r	
1	Gross domestic product (GDP)	17,427.6	18,120.7	18,624.5	18,538.0	18,729.1	18,905.5	19,057.7	19,250.0	1
2	Plus: Income receipts from the rest of the world	847.2	812.9	844.3	843.8	848.4	882.1	895.9	914.8	2
3	Less: Income payments to the rest of the world	612.6	608.4	647.2	648.8	660.1	653.1	681.7	712.4	3
4	Equals: Gross national product	17,662.1	18,325.2	18,821.6	18,733.0	18,917.5	19,134.5	19,272.0	19,452.4	4
5	Less: Consumption of fixed capital	2,748.0	2,841.5	2,916.7	2,908.3	2,927.6	2,950.0	2,986.2	3,020.7	5
	Less: Statistical discrepancy	-229.9	-255.9	-147.2	-132.9	-195.2	-34.4	-102.4	-95.4	6
7	Equals: National income	15,144.0	15,739.6	16,052.0	15,957.6	16,185.1	16,218.9	16,388.2	16,527.1	7
8	Compensation of employees	9,256.5	9,708.3	9,978.6	9,979.6	10,081.4	10,014.9	10,166.3	10,271.4	8
9	Wages and salaries	7,476.8	7,858.9	8,085.2	8,090.2	8,178.1	8,107.8	8,232.1	8,321.7	9
10	Supplements to wages and salaries	1,779.7	1,849.4	1,893.4	1,889.4	1,903.4	1,907.1	1,934.2	1,949.7	10
11	Proprietors' income with inventory valuation and capital consumption adjustments	1,315.8	1,318.8	1,341.9	1,339.5	1,346.1	1,354.6	1,380.2	1,378.6	11
12	Rental income of persons with capital consumption adjustment	611.7	662.5	707.3	704.8	708.1	718.9	730.8	740.3	12
13	Corporate profits with inventory valuation and capital consumption adjustments	2,140.6	2,117.5	2,073.5	1,996.6	2,101.2	2,155.2	2,109.0	2,123.4	13
14	Net interest and miscellaneous payments	535.0	583.4	570.6	568.0	573.7	566.5	588.2	598.3	14
15	Taxes on production and imports less subsidies	1,163.6	1,198.5	1,226.2	1,214.3	1,233.5	1,242.5	1,248.2	1,261.2	15
16	Business current transfer payments (net)	138.9	165.0	164.0	165.0	151.2	176.6	176.5	164.6	16
17	Current surplus of government enterprises	-17.9	-14.3	-10.1	-10.3	-10.1	-10.2	-11.0	-10.7	17
	Addenda:									
18	Gross domestic income (GDI)	17,657.5	18,376.6	18,771.6	18,670.9	18,924.4	18,939.9	19,160.1	19,345.4	18
19	Average of GDP and GDI	17,542.6	18,248.7	18,698.1	18,604.5	18,826.7	18,922.7	19,108.9	19,297.7	19
20	Statistical discrepancy as a percentage of GDP	-1.3	-1.4	-0.8	-0.7	-1.0	-0.2	-0.5	-0.5	20

r Revised Source: U.S. Bureau of Economic Analysis

Table 10. Personal Income and Its Disposition

[Billions of dollars]

					Ç	Seasonally a	adjusted at	annual rates	5	
Line		2014	2015	2016		2016		20	17	Line
					Q2	Q3	Q4	Q1	Q2r	
1	Personal income <sup>1</sup>	14,818.2	15,553.0	15,928.7	15,910.1	16,028.0	16,025.7	16,245.2	16,364.4	1
2	Compensation of employees	9,256.5	9,708.3	9,978.6	9,979.6	10,081.4	10,014.9	10,166.3	10,271.4	2
3	Wages and salaries	7,476.8	7,858.9	8,085.2	8,090.2	8,178.1	8,107.8	8,232.1	8,321.7	3
4	Supplements to wages and salaries	1,779.7	1,849.4	1,893.4	1,889.4	1,903.4	1,907.1	1,934.2	1,949.7	4
5	Proprietors' income with inventory valuation and capital consumption adjustments	1,315.8	1,318.8	1,341.9	1,339.5	1,346.1	1,354.6	1,380.2	1,378.6	5
6	Farm	68.1	53.7	43.2	46.7	41.4	37.8	41.9	37.0	6
7	Nonfarm	1,247.7	1,265.1	1,298.7	1,292.8	1,304.6	1,316.7	1,338.4	1,341.6	7
8	Rental income of persons with capital consumption adjustment	611.7	662.5	707.3	704.8	708.1	718.9	730.8	740.3	8
9	Personal income receipts on assets	2,245.1	2,387.1	2,377.8	2,371.4	2,373.2	2,391.6	2,420.1	2,434.5	9
10	Personal interest income	1,303.3	1,367.3	1,415.3	1,408.4	1,416.9	1,438.5	1,476.6	1,465.1	10
11	Personal dividend income	941.9	1,019.8	962.5	962.9	956.4	953.0	943.5	969.4	11
12	Personal current transfer receipts	2,544.4	2,684.4	2,768.4	2,760.2	2,777.4	2,795.9	2,831.9	2,836.9	12
13	Less: Contributions for government social insurance, domestic	1,155.3	1,208.0	1,245.3	1,245.4	1,258.2	1,250.2	1,284.1	1,297.4	13
14	Less: Personal current taxes	1,785.6	1,937.9	1,960.1	1,950.7	1,983.8	1,977.2	2,018.8	2,012.9	14
15	Equals: Disposable personal income	13,032.6	13,615.0	13,968.6	13,959.4	14,044.3	14,048.5	14,226.4	14,351.5	15
16	Less: Personal outlays	12,293.8	12,786.7	13,288.0	13,214.2	13,366.6	13,537.0	13,671.8	13,805.9	16
17	Equals: Personal saving	738.8	828.4	680.6	745.2	677.7	511.5	554.6	545.6	17
18	Personal saving as a percentage of disposable personal income	5.7	6.1	4.9	5.3	4.8	3.6	3.9	3.8	18
	Addenda:									
19	Personal income excluding current transfer receipts, billions of chained (2009) dollars <sup>2</sup>	11,244.2	11,754.2	11,878.7	11,894.9	11,934.4	11,857.1	11,955.7	12,049.3	19
20	Disposable personal income, billions of chained (2009) dollars <sup>2</sup>	11,939.3	12,436.0	12,608.2	12,627.2	12,649.2	12,590.8	12,680.4	12,783.3	20

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1. Personal income is also equal to national income less corporate profits with inventory valuation and capital consumption adjustments, taxes on production and imports less subsidies, contributions for government social insurance, net interest and miscellaneous payments, business current transfer payments (net), and current surplus of government enterprises, plus personal income receipts on assets, and personal current transfer receipts.

2. The current-dollar measure is deflated by the implicit price deflator for personal consumption expenditures.

Source: U.S. Bureau of Economic Analysis

Table 11. Corporate Profits: Level and Percent Change

					Billions	of dollars					Perce	ent chang	e from pre	eceding pe	eriod		
Line		2014	2015	2016	Sea	asonally a	djusted at	annual ra	ates	2015	2016		Quarter	ly rates		Quarter one year ago	Line
		2014	2013	2010		2016		20	17	2013	2010	20	16	20	17	2017	
					Q2	Q3	Q4	Q1	Q2 <sup>r</sup>			Q3	Q4	Q1	Q2r	Q2r	
1	Corporate profits with inventory valuation and capital consumption adjustments	2,140.6	2,117.5	2,073.5	1,996.6	2,101.2	2,155.2	2,109.0	2,123.4	-1.1	-2.1	5.2	2.6	-2.1	0.7	6.3	1
2	Less: Taxes on corporate income	505.3	507.4	471.0	471.5	487.2	469.5	466.3	479.6	0.4	-7.2	3.3	-3.6	-0.7	2.9	1.7	2
3	Equals: Profits after tax with inventory valuation and capital consumption adjustments	1,635.3	1,610.0	1,602.4	1,525.1	1,614.1	1,685.7	1,642.7	1,643.8	-1.5	-0.5	5.8	4.4	-2.6	0.1	7.8	3
4	Net dividends	986.4	1,039.9	981.9	971.3	976.3	979.1	988.1	994.2	5.4	-5.6	0.5	0.3	0.9	0.6	2.4	4
5	Undistributed profits with inventory valuation and capital consumption adjustments	648.9	570.1	620.6	553.9	637.7	706.6	654.6	649.6	-12.1	8.9	15.1	10.8	-7.4	-0.8	17.3	5
	Addenda for corporate cash flow:																
6	Net cash flow with inventory valuation adjustment	2,111.3	2,098.4	2,179.3	2,108.1	2,206.8	2,269.1	2,229.1	2,269.9	-0.6	3.9	4.7	2.8	-1.8	1.8	7.7	6
7	Undistributed profits with inventory valuation and capital consumption adjustments	648.9	570.1	620.6	553.9	637.7	706.6	654.6	649.6	-12.1	8.9	15.1	10.8	-7.4	-0.8	17.3	7
8	Consumption of fixed capital	1,465.7	1,525.1	1,563.2	1,559.8	1,567.4	1,577.9	1,599.7	1,618.8	4.1	2.5	0.5	0.7	1.4	1.2	3.8	8
9	Less: Capital transfers paid (net)	3.3	-3.2	4.4	5.6	-1.6	15.4	25.3	-1.5								9
	Addenda:																
10	Profits before tax (without inventory valuation and capital consumption adjustments)	2,249.1	2,158.5	2,158.9	2,123.6	2,179.6	2,256.8	2,276.8	2,254.3	-4.0	0.0	2.6	3.5	0.9	-1.0	6.2	10
11	Profits after tax (without inventory valuation and capital consumption adjustments)	1,743.8	1,651.1	1,687.9	1,652.1	1,692.4	1,787.4	1,810.5	1,774.7	-5.3	2.2	2.4	5.6	1.3	-2.0	7.4	11
12	Inventory valuation adjustment	4.1	52.4	2.7	-36.1	7.3	-17.5	-75.0	-33.6								12
13	Capital consumption adjustment	-112.6	-93.5	-88.2	-90.9	-85.7	-84.2	-92.8	-97.4								13

r Revised Source: U.S. Bureau of Economic Analysis

Table 12. Corporate Profits by Industry: Level and Change From Preceding Period [Billions of dollars]

					Le	vel					Chan	ige from pi	receding p	eriod		
Lino					Se	asonally a	djusted at	annual rat	es			20	1/	201	17	Line
Line		2014	2015	2016		2016		20	17	2015	2016	20	10	201	1	Line
					Q2	Q3	Q4	Q1	Q2r			Q3	Q4	Q1	Q2r	
1	Corporate profits with inventory valuation and capital consumption adjustments	2,140.6	2,117.5	2,073.5	1,996.6	2,101.2	2,155.2	2,109.0	2,123.4	-23.1	-44.0	104.6	53.9	-46.2	14.4	1
2	Domestic industries	1,743.0	1,732.5	1,678.7	1,607.6	1,712.9	1,719.6	1,682.7	1,707.9	-10.6	-53.8	105.3	6.7	-36.9	25.2	2
3	Financial	446.3	456.7	454.6	426.4	489.0	516.2	475.5	441.6	10.3	-2.0	62.6	27.2	-40.7	-33.8	3
4	Nonfinancial	1,296.7	1,275.8	1,224.1	1,181.2	1,223.8	1,203.4	1,207.2	1,266.3	-20.9	-51.7	42.6	-20.5	3.8	59.1	4
5	Rest of the world	397.5	385.0	394.7	389.0	388.4	435.6	426.3	415.5	-12.6	9.8	-0.7	47.3	-9.3	-10.8	5
6	Receipts from the rest of the world	686.4	653.1	671.4	674.4	674.2	699.3	704.7	710.1	-33.3	18.3	-0.2	25.1	5.4	5.5	6
7	Less: Payments to the rest of the world	288.9	268.1	276.7	285.4	285.8	263.7	278.3	294.6	-20.7	8.6	0.4	-22.2	14.7	16.3	7
8	Corporate profits with inventory valuation adjustment	2,253.2	2,210.9	2,161.6	2,087.5	2,187.0	2,239.4	2,201.8	2,220.8	-42.2	-49.3	99.5	52.4	-37.5	18.9	8
9	Domestic industries	1,855.6	1,826.0	1,766.9	1,698.5	1,798.6	1,803.7	1,775.5	1,805.2	-29.7	-59.0	100.1	5.1	-28.2	29.8	9
10	Financial	483.9	497.9	501.8	473.4	536.8	564.8	523.7	489.9	13.9	4.0	63.4	28.0	-41.1	-33.8	10
11	Federal Reserve banks	103.5	100.7	92.0	93.0	89.5	88.1	90.5	80.9	-2.7	-8.8	-3.5	-1.5	2.4	-9.6	11
12	Other financial	380.5	397.1	409.9	380.5	447.3	476.7	433.2	409.0	16.7	12.7	66.9	29.4	-43.5	-24.2	12
13	Nonfinancial	1,371.7	1,328.1	1,265.1	1,225.0	1,261.8	1,238.9	1,251.8	1,315.3	-43.6	-63.0	36.7	-22.8	12.8	63.5	13
14	Utilities	31.5	21.8	19.3	17.1	16.1	21.2	27.6	28.2	-9.7	-2.5	-1.0	5.0	6.5	0.6	14
15	Manufacturing	452.0	417.1	392.6	374.0	385.4	386.8	370.4	389.6	-34.9	-24.5	11.4	1.4	-16.4	19.2	15
16	Durable goods	230.0	218.4	212.2	198.2	206.4	224.3	208.5	219.2	-11.6	-6.2	8.2	17.9	-15.8	10.7	16
17	Fabricated metal products	23.9	23.6	20.1	16.9	19.6	20.9	16.2	21.6	-0.2	-3.6	2.7	1.3	-4.6	5.4	17
18	Machinery	34.6	24.2	17.8	16.8	17.6	18.1	23.5	24.6	-10.4	-6.4	0.8	0.5	5.4	1.1	18
19	Computer and electronic products	53.2	53.9	49.9	46.5	48.6	49.3	43.3	43.0	0.7	-4.0	2.1	0.7	-6.0	-0.3	19
20	Electrical equipment, appliances, and components	14.2	19.6	23.7	22.7	24.7	26.5	22.7	22.4	5.4	4.1	1.9	1.8	-3.8	-0.3	20
21	Motor vehicles, bodies and trailers, and parts	30.7	26.3	26.4	32.4	23.1	20.1	19.6	20.3	-4.3	0.1	-9.3	-2.9	-0.6	0.8	21
22	Other durable goods	73.5	70.7	74.3	62.9	72.8	89.3	83.2	87.2	-2.7	3.6	9.9	16.5	-6.1	4.0	22
23	Nondurable goods	222.0	198.7	180.4	175.8	179.0	162.5	161.9	170.4	-23.3	-18.3	3.3	-16.5	-0.6	8.6	23
24	Food and beverage and tobacco products	58.9	71.7	76.0	78.5	77.4	74.4	63.0	66.3	12.8	4.3	-1.1	-3.1	-11.4	3.3	24
25	Petroleum and coal products	58.5	17.3	-2.2	-2.1	-2.4	-12.2	2.1	6.2	-41.2	-19.5	-0.3	-9.8	14.2	4.2	25
26	Chemical products	75.6	73.7	68.9	64.8	67.1	61.3	61.5	62.6	-1.9	-4.9	2.2	-5.7	0.1	1.1	26
27	Other nondurable goods	29.1	36.0	37.7	34.5	36.9	38.9	35.3	35.3	6.9	1.7	2.4	2.1	-3.6	-0.1	27
28	Wholesale trade	149.8	147.6	125.4	116.9	141.9	98.3	90.3	107.8	-2.2	-22.3	25.0	-43.6	-8.0	17.5	28
29	Retail trade	159.8	171.8	179.1	171.4	185.1	183.8	179.6	183.9	12.1	7.2	13.7	-1.3	-4.2	4.4	29
30	Transportation and warehousing	60.4	61.2	56.1	57.3	54.1	49.7	59.2	73.6	0.9	-5.1	-3.3	-4.3	9.4	14.5	30
31	Information	114.8	137.2	137.6	135.7	132.3	141.9	138.2	131.0	22.4	0.4	-3.4	9.6	-3.7	-7.2	31
32	Other nonfinancial	403.5	371.3	355.0	352.5	346.9	357.3	386.6	401.1	-32.2	-16.3	-5.7	10.5	29.3	14.5	32
33	Rest of the world	397.5	385.0	394.7	389.0	388.4	435.6	426.3	415.5	-12.6	9.8	-0.7	47.3	-9.3	-10.8	33

Nore. Estimates in this table are based on the 2002 North American Industry Classification System (NAICS). Source: U.S. Bureau of Economic Analysis

Table 13. Gross Value Added of Nonfinancial Domestic Corporate Business

						Seasonally a	adjusted at an	inual rates		
Line		2014	2015	2016		2016		201	7	Line
				Ī	Q2	Q3	Q4	Q1	Q2r	
		Billions	of dollars	i		·				
1	Gross value added of nonfinancial corporate business	8,716.9	9,059.3	9,165.4	9,112.4	9,217.3	9,186.7	9,294.5	9,449.9	1
2	Consumption of fixed capital	1,285.7	1,336.1	1,364.9	1,362.6	1,367.7	1,375.6	1,399.5	1,416.1	2
3	Net value added	7,431.2	7,723.3	7,800.5	7,749.9	7,849.7	7,811.0	7,895.0	8,033.8	3
4	Compensation of employees	5,004.2	5,269.3	5,406.9	5,411.2	5,457.1	5,415.9	5,500.8	5,568.3	4
5	Wages and salaries	4,182.1	4,412.3	4,539.1	4,542.7	4,580.7	4,546.6	4,615.1	4,675.0	5
6	Supplements to wages and salaries	822.1	857.0	867.8	868.5	876.4	869.3	885.7	893.3	6
7	Taxes on production and imports less subsidies	746.6	764.6	783.0	776.0	788.0	792.8	795.8	803.1	7
8	Net operating surplus	1,680.4	1,689.4	1,610.6	1,562.7	1,604.6	1,602.3	1,598.4	1,662.4	8
9	Net interest and miscellaneous payments	291.6	308.9	300.9	301.6	299.4	298.6	309.7	315.0	9
10	Business current transfer payments (net)	92.1	104.6	85.6	79.9	81.4	100.4	81.5	81.2	10
11	Corporate profits with inventory valuation and capital consumption adjustments	1,296.7	1,275.8	1,224.1	1,181.2	1,223.8	1,203.4	1,207.2	1,266.3	11
12	Taxes on corporate income	291.8	281.1	274.1	272.6	277.5	283.5	277.5	294.1	12
13	Profits after tax with inventory valuation and capital consumption adjustments	1,005.0	994.7	950.0	908.6	946.3	919.9	929.7	972.2	13
14	Net dividends	598.3	651.8	685.2	678.8	680.6	705.9	696.2	728.7	14
15	Undistributed profits with inventory valuation and capital consumption adjustments	406.6	343.0	264.8	229.9	265.7	214.0	233.5	243.5	
	Addenda:									
16	Profits before tax (without inventory valuation and capital consumption adjustments)	1,367.6	1,275.7	1,262.4	1,261.2	1,254.4	1,256.4	1,326.8	1,348.9	16
17	Profits after tax (without inventory valuation and capital consumption adjustments)	1,075.9	994.6	988.2	988.6	976.9	973.0	1,049.3	1,054.8	17
18	Inventory valuation adjustment	4.1	52.4	2.7	-36.1	7.3	-17.5	-75.0	-33.6	18
19	Capital consumption adjustment	-75.0	-52.3	-41.0	-43.8	-37.9	-35.6	-44.6	-49.0	19
	Billion	ns of chair	ned (2009)	dollars						
20	Gross value added of nonfinancial corporate business 1	8,064.8	8,358.1	8,471.7	8,413.3	8,565.5	8,481.3	8,566.1	8,722.6	20
21	Consumption of fixed capital <sup>2</sup>	1,215.0	1,255.8	1,292.5	1,288.9	1,296.9	1,304.1	1,313.3	1,323.0	21
22	Net value added <sup>3</sup>	6,849.9	7,102.3	7,179.3	7,124.4	7,268.7	7,177.2	7,252.8	7,399.6	22
	Dollars;	quarters s	seasonally	y adjusted	l					
	Price, costs, and profits per unit of real gross value added of nonfinancial corporate business:									
23	Price per unit of real gross value added of nonfinancial corporate business <sup>4</sup>	1.081	1.084	1.082	1.083	1.076	1.083	1.085	1.083	23
24	Compensation of employees (unit labor cost)	0.620	0.630	0.638	0.643	0.637	0.639	0.642	0.638	
25	Unit nonlabor cost	0.300	0.301	0.299	0.300	0.296	0.303	0.302	0.300	
26	Consumption of fixed capital	0.159	0.160	0.161	0.162	0.160	0.162	0.163	0.162	26
27	Taxes on production and imports less subsidies plus business current transfer payments (net)	0.104	0.104	0.103	0.102	0.101	0.105	0.102	0.101	27
28	Net interest and miscellaneous payments	0.036	0.037	0.036	0.036	0.035	0.035	0.036	0.036	
29	Corporate profits with inventory valuation and capital consumption adjustments (unit profits from current production)	0.161	0.153	0.144	0.140	0.143	0.142	0.141	0.145	
30	Taxes on corporate income	0.036	0.034	0.032	0.032	0.032	0.033	0.032	0.034	
31	Profits after tax with inventory valuation and capital consumption adjustments	0.125	0.119	0.112	0.108	0.110	0.108	0.109	0.111	31

r Revised

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1. The current-dollar gross value added is deflated using the gross value added chain-type price index for nonfinancial industries from the GDP-by-industry accounts. For periods when this price index is not available, the chain-type price index for GDP goods and structures is used.

2. Chained-dollar consumption of fixed capital of nonfinancial corporate business is calculated as the product of the chain-type quantity index and the 2009 current-dollar value of the corresponding series, divided by 100.

3. Chained-dollar net value added of nonfinancial corporate business is the difference between the gross value added and the consumption of fixed capital.

4. The deflator for gross value added of nonfinancial corporate business divided by 100.

Note: Estimates in this table are based on the 2002 North American Industry Classification System (NAICS).

Source: U.S. Bureau of Economic Analysis

### Appendix Table A. Real Gross Domestic Product and Related Aggregates and Price Indexes: Percent Change From Preceding Period and Contributions to Percent Change

										Se	asonally	adjust	ed at an	nual rat	es						
ine		2014	2015	2016	20	13		20	14			20	15			20	16		20	17	Line
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2r	
				Perce	ent ch	ange	from p	orece	ding p	eriod											
	Gross domestic product (GDP) and related aggregates:																				
1	GDP	2.6	2.9	1.5	3.1	4.0	-0.9	4.6	5.2	2.0	3.2	2.7	1.6	0.5	0.6	2.2	2.8	1.8	1.2	3.1	1
2	Goods	3.6	3.1	1.4	7.5	10.0	-7.8	9.2	10.6	-1.4	2.8	2.5	3.1	-0.7	-2.2	4.1	4.7	3.0	-1.6	7.3	2
3	Services	1.7	2.6	1.7	0.4	1.8	1.9	1.6	3.1	3.1	3.5	1.9	1.4	2.2	0.7	2.4	2.2	1.0	1.5	2.1	3
4	Structures	5.1	4.0	0.4	8.6	-2.6	5.5	11.6	1.4	6.9	3.1	10.3	-1.7	-8.0	10.0	-5.2	0.1	3.4	10.3	-4.3	4
5	Motor vehicle output	7.6	5.4	1.6	-13.8	25.5	5.0	12.6	13.0	-4.7	5.4	10.0	16.7	-17.1	2.8	9.4	2.7	-1.9	-7.3	0.8	
6	GDP excluding motor vehicle output	2.4	2.8	1.5	3.6	3.4	-1.1	4.4	5.0	2.2	3.2	2.5	1.2	1.1	0.5	2.0	2.8	1.9	1.5	3.1	-
7	Final sales of computers <sup>1</sup>	11.2	6.3	13.0	-4.7	12.7	15.7	38.3	0.2	-21.6	11.8	31.5	1.2	8.5	38.9	12.3	-7.9	-7.8	23.3	22.3	
8	GDP excluding final sales of computers	2.5	2.8	1.4	3.2	3.9	-1.0	4.5	5.2	2.1	3.2	2.6	1.6	0.5	0.5	2.2	2.8	1.8	1.2	3.0	8
9	Research and development	0.6	1.2	4.9	-1.0	-3.7	2.7	-1.0	3.7	10.0	-9.2	4.0	1.8	7.4	3.3	11.2	2.2	-1.1	7.1	1.3	Ç
10	GDP excluding research and development	2.6	2.9	1.4	3.2	4.2	-1.0	4.8	5.2	1.8	3.6	2.7	1.6	0.3	0.5	2.0	2.8	1.8	1.1	3.1	10
11	Farm gross value added <sup>2</sup>	-1.3	7.8	12.4	28.2	-9.2	-21.3	3.9	-1.6	18.2	4.6	-0.2	29.8	-0.7	26.6	14.4	3.5	-3.8	-32.4	-13.9	11
12	Nonfarm business gross value added 3	3.3	3.4	1.5	3.8	5.6	-1.4	5.8	6.9	2.3	4.0	3.3	1.3	0.3	0.2	2.5	3.3	2.2	1.8	3.9	12
	Price indexes:																				
13	GDP	1.8	1.1	1.3	2.1	2.1	1.6	2.2	1.9	0.6	-0.1	2.2	1.4	0.8	0.3	2.4	1.4	2.0	2.0	1.0	13
14	GDP excluding food and energy <sup>4</sup>	1.9	1.3	1.6	2.0	2.3	1.8	1.8	1.9	1.2	0.6	1.7	1.5	1.1	1.3	2.2	1.9	1.6	2.4	1.1	14
15	GDP excluding final sales of computers	1.8	1.1	1.3	2.1	2.1	1.6	2.2	1.9	0.6	-0.1	2.2	1.4	0.8	0.3	2.5	1.4	2.0	2.1	1.1	15
16	Gross domestic purchases	1.7	0.4	1.0	1.6	2.1	2.2	1.6	1.5	0.2	-1.3	1.4	1.1	0.2	0.1	2.1	1.5	1.8	2.6	0.9	16
17	Gross domestic purchases excluding food and energy <sup>4</sup>	1.8	1.1	1.4	1.6	2.2	1.8	1.7	1.8	1.2	0.4	1.4	1.3	1.0	1.1	2.0	1.7	1.4	2.3	1.3	1
18	Gross domestic purchases excluding final sales of computers to domestic purchasers	1.7	0.5	1.0	1.7	2.1	2.2	1.7	1.6	0.3	-1.3	1.5	1.1	0.3	0.2	2.0	1.5	1.9	2.6	0.9	18
19	Personal consumption expenditures (PCE)	1.5	0.3	1.2	1.5	1.7	2.1	1.8	1.2	-0.3	-1.6	1.7	1.3	0.2	0.6	2.1	1.7	2.0	2.2	0.3	19
20	PCE excluding food and energy <sup>4</sup>	1.6	1.3	1.8	1.4	1.8	1.5	2.0	1.6	1.1	0.9	1.7	1.5	1.2	2.1	2.0	2.0	1.3	1.8	0.9	20
21	Market-based PCE <sup>5</sup>	1.2	-0.1	0.8	1.4	1.3	1.8	1.3	0.9	-0.8	-2.0	1.6	1.0	-0.2	0.1	1.7	1.4	1.9	2.3	-0.4	2
22	Market-based PCE excluding food and energy <sup>5</sup>	1.2	1.1	1.4	1.3	1.2	1.2	1.5	1.3	0.7	0.7	1.5	1.2	1.0	1.7	1.5	1.6	1.1	1.9	0.3	22
	0 03	ontrik							gross	dome	estic p		:t								
	Percent change at annual rate:																				
23	Gross domestic product	2.6	2.9	1.5	3.1	4.0	-0.9	4.6	5.2	2.0	3.2	2.7	1.6	0.5	0.6	2.2	2.8	1.8	1.2	3.1	23
	Percentage points at annual rates:																				
24	Goods	1.10	0.93	0.41	2.26	3.02	-2.46	2.75	3.18	-0.41	0.85	0.77	0.93	-0.21	-0.64	1.21	1.39	0.88	-0.47	2.10	24
25	Services	1.08	1.61	1.04	0.24	1.14	1.14	0.98	1.92	1.90	2.14	1.18	0.93	1.37	0.46	1.46	1.39	0.61	0.91	1.32	25
26	Structures	0.39	0.32	0.04	0.62	-0.20	0.41	0.96	0.11	0.53	0.25	0.80	-0.15	-0.67	0.46	-0.43	0.01	0.01	0.80	-0.36	20
	Motor vehicle output	0.39	0.32	0.04	-0.41	0.63	0.41	0.34	0.11	-0.14	0.25	0.00	0.47	-0.56	0.78	0.26	0.01	-0.06	-0.22	0.02	2
	Final sales of computers	0.21	0.13	0.05	-0.41	0.05	0.14	0.34	0.00	-0.14	0.16	0.26	0.47	0.03	0.08	0.20	-0.03	-0.03	0.08	0.02	28
	•	0.04	0.02	0.05	-0.02	-0.10	0.06	-0.02	0.00	0.10	-0.24	0.11	0.01	0.03	0.13	0.05	0.06	-0.03	0.08	0.08	28
29	Research and development	0.02	0.03	0.12	-0.03	-0.10	0.07	-0.02	0.09	0.24	-0.24	0.10	0.05	0.18	0.00	0.27	0.00	-0.03	0.18	0.03	29

r Revised

1. For some components of final sales of computers, includes computer parts.

2. Farm output less intermediate goods and services purchased.

3. Consists of GDP less gross value added of farm, of households and institutions, and of general government.

4. Food excludes personal consumption expenditures for purchased meals and beverages, which are classified in food services.

5. This index is a supplemental measure that is based on household expenditures for which there are observable price measures. It excludes most implicit prices (for example, financial services furnished without payment) and the final consumption expenditures of nonprofit institutions serving households.

See Explanatory Note at the end of the tables.

Source: U.S. Bureau of Economic Analysis

## **Explanatory Note: NIPA Measures of Quantities and Prices**

Current-dollar GDP is a measure of the market value of goods, services, and structures produced in the economy in a particular period. Changes in current-dollar GDP can be decomposed into quantity and price components. Quantities, or "real" measures, and prices are expressed as index numbers with the reference year -- at present, the year 2009 -- equal to 100.

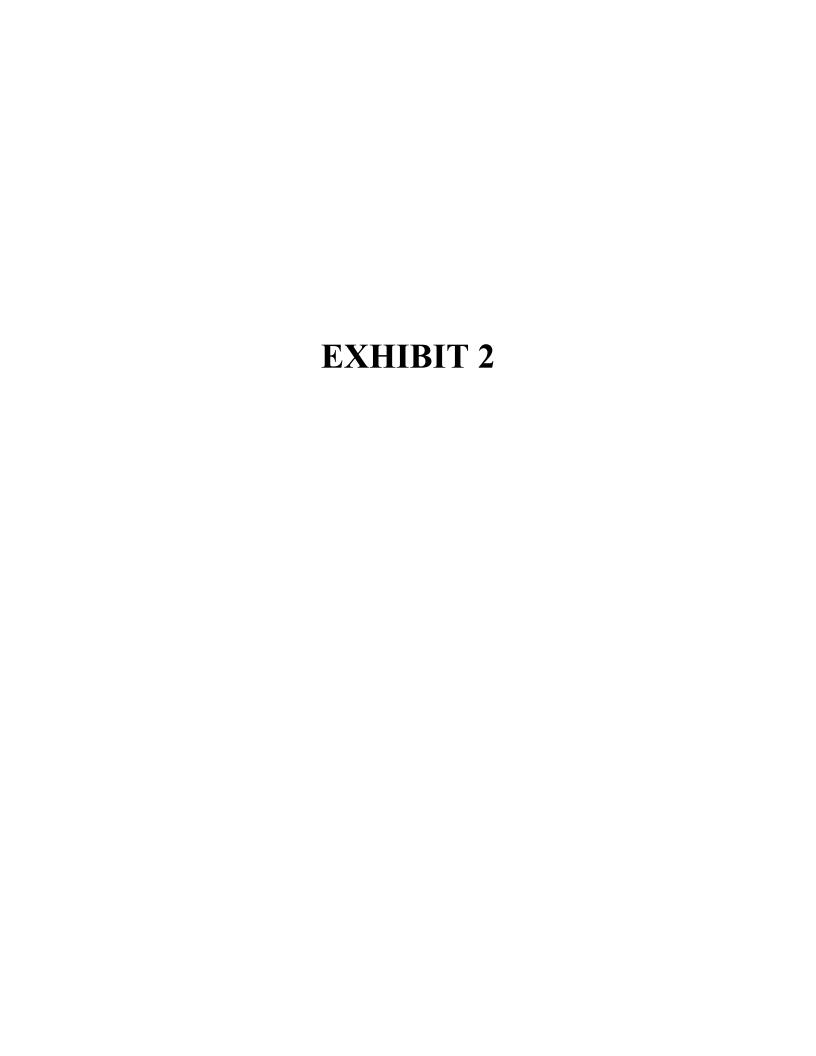
Annual changes in quantities and prices are calculated using a Fisher formula that incorporates weights from two adjacent years. (Quarterly changes in quantities and prices are calculated using a Fisher formula that incorporates weights from two adjacent quarters; quarterly indexes are adjusted for consistency to the annual indexes before percent changes are calculated.) For example, the 2008-09 annual percent change in real GDP uses prices for 2008 and 2009 as weights, and the 2008-09 annual percent change in GDP prices uses quantities for 2008 and 2009 as weights. These annual changes are "chained" (multiplied) together to form time series of quantity and price indexes. Percent changes in Fisher indexes are not affected by the choice of reference year. (BEA also publishes a measure of the price level known as the implicit price deflator (IPD), which is calculated as the ratio of the current-dollar value to the corresponding chained-dollar value, multiplied by 100. The values of the IPD are very close to the values of the corresponding "chain-type" price index.)

Index numbers of quantity and price indexes for GDP and its major components are presented in this release in tables 5 and 6. Percent changes from the preceding period are presented in tables 1, 4, 7, 8, and appendix table A. Contributions by major components to the percent change in real GDP are presented in table 2.

Measures of real GDP and its major components are also presented in dollar-denominated form, designated "chained (2009) dollar estimates." For most series, these estimates, which are presented in table 3, are computed by multiplying the current-dollar value in 2009 by a corresponding quantity index number and then dividing by 100. For example, if a current-dollar GDP component equaled \$100 in 2009 and if real output for this component increased 10 percent in 2010, then the chained (2009) dollar value of this component in 2010 would be  $$110 = $100 \times 110 / 100$ . Percent changes calculated from chained-dollar estimates and from chain-type quantity indexes are the same; any differences will be small and due to rounding.

Chained-dollar values for the detailed GDP components will not necessarily sum to the chained-dollar estimate of GDP (or to any intermediate aggregate). This is because the relative prices used as weights for any period other than the reference year differ from those of the reference year. A measure of the extent of such differences is provided by a "residual" line, which indicates the difference between GDP (or other major aggregate) and the sum of the most detailed components in the table. For periods close to the reference year, when there usually has not been much change in the relative prices that are used as weights, the residuals tend to be small, and the chained-dollar estimates can be used to approximate the contributions to growth and to aggregate the detailed estimates. For periods further from the reference year, the residuals tend to be larger, and the chained-dollar estimates are less useful for analyses of contributions to growth. Thus, the contributions to percent change shown in table 2 provide a better measure of the composition of GDP growth. In particular, for components for which relative prices are changing rapidly, calculation of contributions using chained-dollar estimates may be misleading even just a few years from the reference year.

Reference "Chained-Dollar Indexes: Issues, Tips on Their Use, and Upcoming Changes," November 2003 Survey, pp. 8-16.





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# Even with uncertainties looming, healthy gains projected for 2017 building activity

By Kermit Baker, Hon. AIA, January 25, 2017

Consensus	•		Estimated \$	Fore % Ch	
Dodge Data & Analytics	•		2016	2017	2018
,	•	Nonresidential Total	-	5.6	4.9
IHS Economics	•	Commercial Total		8.3	4.4
		Office		10.6	4.6
Moody's Economy.com	•	Retail & Other Commercial		6.8	5.3
FMI	•	Hotel	-	7.2	1.8
11911		Industrial Total	-	0.4	3.3
ConstructConnect	•	Institutional Total		5.7	5.8
		Health		4.9	4.9
Associated Builders and Contractors	•	Education		6.3	6.7
Wells Farra Constitute III C		Religious		-1.9	0.6
Wells Fargo Securities, LLC	•	Public Safety		-0.7	4.0
		Amusement & Recreation	-	7.7	4.3

THIS IS A SCREENSHOT FROM THE CONSENSUS CONSTRUCTION FORECAST, DECEMBER 2016. CLICK THE LINK BELOW TO VIEW INDIVIDUAL FORECAST DETAILS.

# View the interactive Consenus Construction Forecast >

2016 was a chaotic year for nonresidential building activity. For most serving this market, it turned out to be a successful year—construction spending in this sector rose almost 8 percent, according to current estimates—even as challenges to the industry were continually emerging. Construction labor remains a major concern. Virtually every segment of the design and construction market is reporting that recruiting and retaining qualified staff is a growing issue. Many workers left the industry during the downturn, and others left the workforce entirely. Rebuilding a competent and productive workforce is a challenge, particularly when the national unemployment rate is below 5 percent.

The decade-long decline in interest rates is coming to an end. Long-term rates have been edging up in recent months, and the Federal Reserve Board's hike in short-term interest rates in December is likely to be matched by another two to three increases this year. Many feel that this current economic cycle is well past its prime, so a recession watch remains. While the imminent threat of a national economic recession seems modest, most analysts have it in the back of their minds and each new economic threat will be viewed in this context.

However, entering 2017, the industry is looking forward to another couple of years of healthy growth. The economy in general is doing well, with healthy job growth, rising wages, low interest rates, and very strong levels of business and consumer confidence. Construction levels surprised many on the upside this past year, particularly for most commercial categories. According to current estimates, spending on offices increased more than 20 percent in 2016, hotel spending was up about 25 percent, and even retail and other commercial facilities saw growth of about 10 percent. Industrial construction was weak, as expected. Institutional project activity was somewhat disappointing, particularly for healthcare facilities.

For the coming year, the AIA Consensus Forecast panelists are projecting growth in overall nonresidential building spending of almost 6 percent, virtually identical to their projection from mid-year 2016. Commercial

construction activity is expected to increase in excess of 8 percent this year, which is slightly above the projection from mid-2016. Industrial construction looks to remain essentially flat at 2016 levels, below the growth expected as of the last forecast. Institutional construction is projected to grow at an almost 6 percent pace, largely unchanged from last summer's consensus.

The Consensus Forecast panel sees the construction cycle continuing to ease moving into 2018. Overall building spending should increase by about 5 percent that year, with the commercial and industrial sectors growing at a slower rate than the overall building sector. Institutional building activity will pick up some of the slack, growing nearly 6 percent. Educational facilities are expected to see healthy gains, and even healthcare spending is projected to be fairly strong.

# How the new administration's potential policies may impact construction

The general uncertainty surrounding the construction outlook has been heightened by new policy directions being proposed by the Trump administration. Many of these policy discussions are not yet sufficiently developed to project specific implications, but there is a long list of issue areas that may have an impact.

- Infrastructure investment: The infrastructure investment proposal is the one area under discussion that has the greatest direct impact on the construction industry. With national construction spending currently running at about a \$1.2 trillion a year pace, this proposal to increase spending by up to \$1 trillion over the coming decade would have a dramatic impact on the industry. In all likelihood, buildings would not be much a focus for most of these projects. However, the additional demand for labor and materials would put pressure on an already stressed industry.
- Repeal and replace Obamacare: Healthcare accounts for about 10
  percent of building spending nationally, so major changes to the
  healthcare system, or even uncertainty surrounding the possibility of
  major changes, could have significant impacts on building construction
  levels.

- National Association of Home Builders concludes that, on average, regulations imposed by government at all levels account for 25 percent of the final price of a new single-family home built for sale. While the federal government has limited ability to influence state and local regulations, initiatives to reduce government's involvement in the private sector construction process would likely streamline the design and construction process.
- **Tax reform:** Trump administration proposals for simplifying and potentially reducing tax burdens are likely to have disproportionate benefits to the corporate sector and upper-income individuals. This would likely increase the availability of capital for investment, thereby increasing commercial and industrial construction, at least in the short term.
- Trade: Restricting trade would likely increase prices of imported construction products. For construction product manufacturers, those relying on exports could see reduced demand, as our trading partners may decide to match any US restrictions on their goods. Those with import competition might see increased demand, as tariffs or restrictions likely would raise prices on these imported goods.
- **Immigration:** Construction is one of the US industries that is most reliant on immigration for its workforce. Limiting immigration could exacerbate an already serious labor problem in the industry.
- Financial deregulation: Rolling back Dodd-Frank provisions would increase the availability capital for mortgage, real estate, and construction loans. Privatizing government-sponsored enterprises like Fannie Mae and Freddie Mac could reduce lending to the residential sector.
- Energy policy: Efforts to make the US energy independent would unleash
  programs to boost fossil-fuel production. Incentives to encourage the
  development of renewable energy sources and promote sustainable
  design and construction would likely be significantly reduced with these
  programs.

While few of the proposals around these ideas directly affect construction, most have at least some potential impact on the industry. Some would generate more construction activity, and others less. Monitoring progress along these agenda items will help to assess how construction will fare in the coming years.

#### **Encouraging outlook for construction**

The prospects for the construction sector for this year and next remain quite positive. Even with all the challenges facing the industry, the expectations are that construction spending will outperform the broader economy this year and next. The AIA's Architecture Billings Index (ABI), an accurate indicator of construction activity that leads spending in the nonresidential sector by nine to 12 months, moved up sharply in December. Firms with a commercial/industrial, as well as those with an institutional specialization reported the strongest growth of the year in December, once seasonal adjustments are applied. New design work is coming into architectural firms at a healthy pace, and firm backlogs are at sound levels, so the industry has a lot of momentum heading into 2017.

Still, it is clear that the industry is on the down side of this construction cycle, meaning the growth rates will slow in the coming quarters. The commercial sector is typically the first building sector to see a slowdown, and that is expected to be the case again this time, with growth in construction spending on commercial buildings projected to fall from about 17 percent last year to 8 percent this year to just over 4 percent in 2018. Institutional construction will offset some of this slower growth, with spending growth of about 4.5 percent last year rising to around 6 percent this year and next. However, being this late in the cycle, the industry is more vulnerable to external disruptions, and the list of possibilities in this category is very long at present.

Kermit Baker, Hon. AIA, is the AIA's Chief Economist and part of the AIA Economics and Market Research Group, which provides AIA members with insights and analysis of the economic factors that shape the business of architecture.

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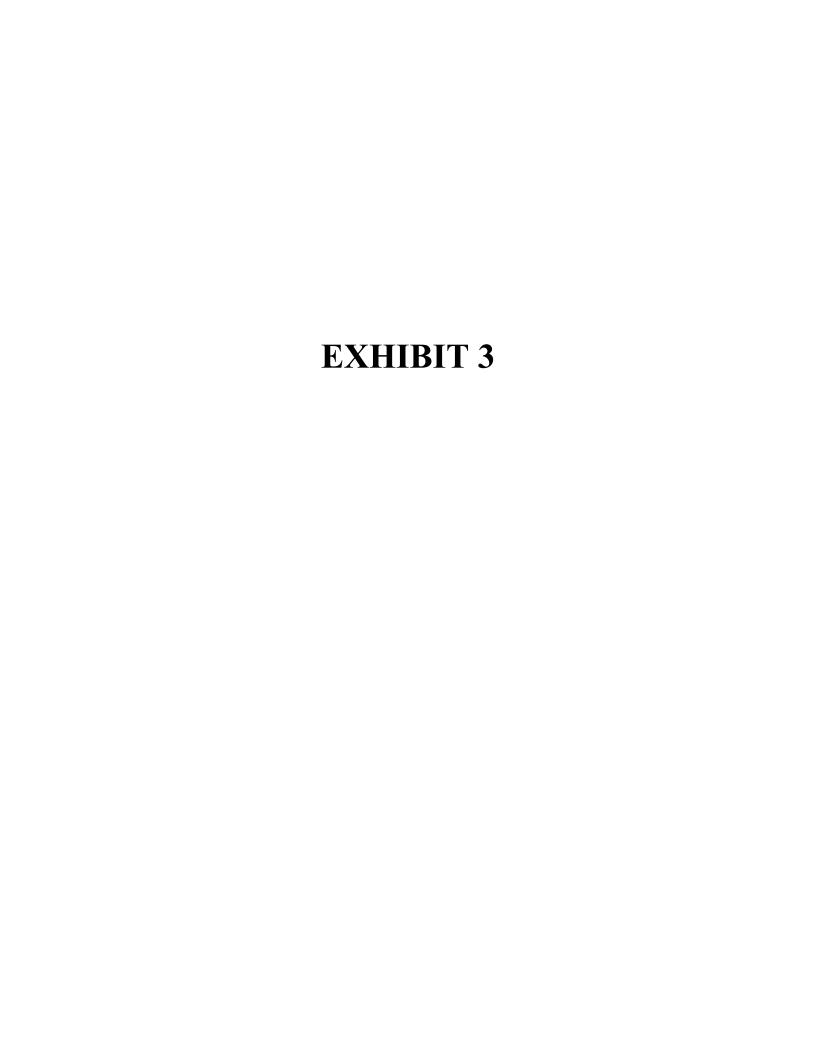
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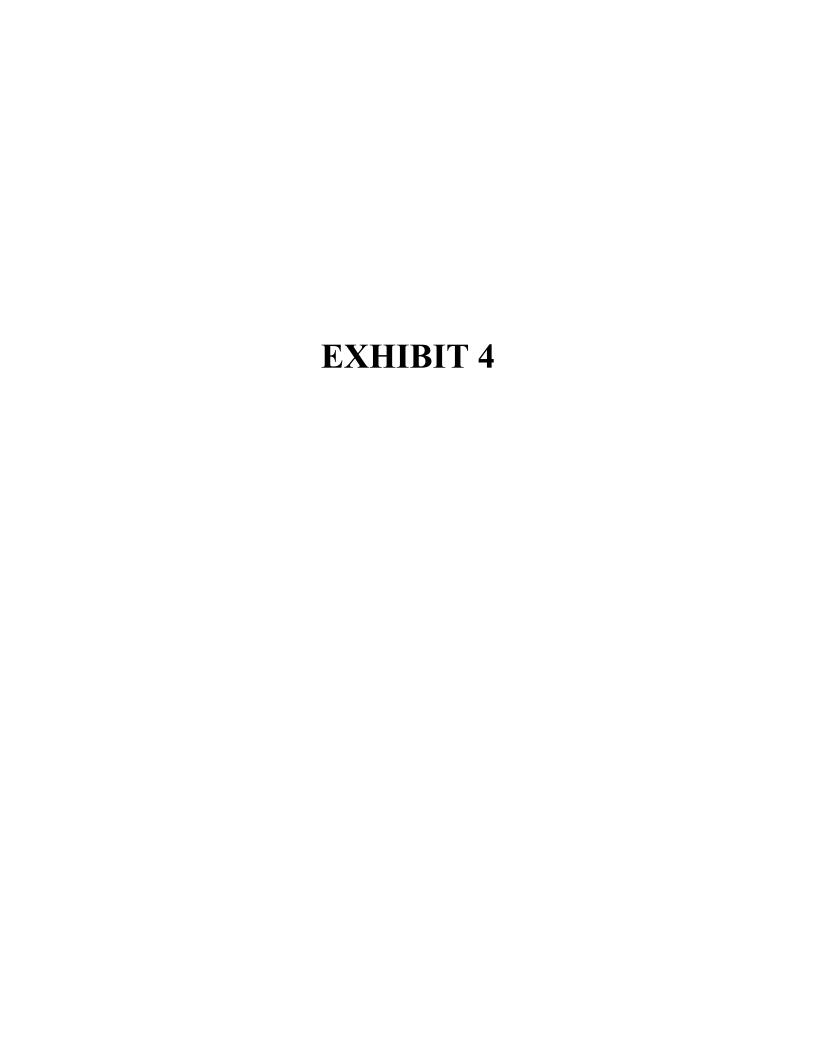
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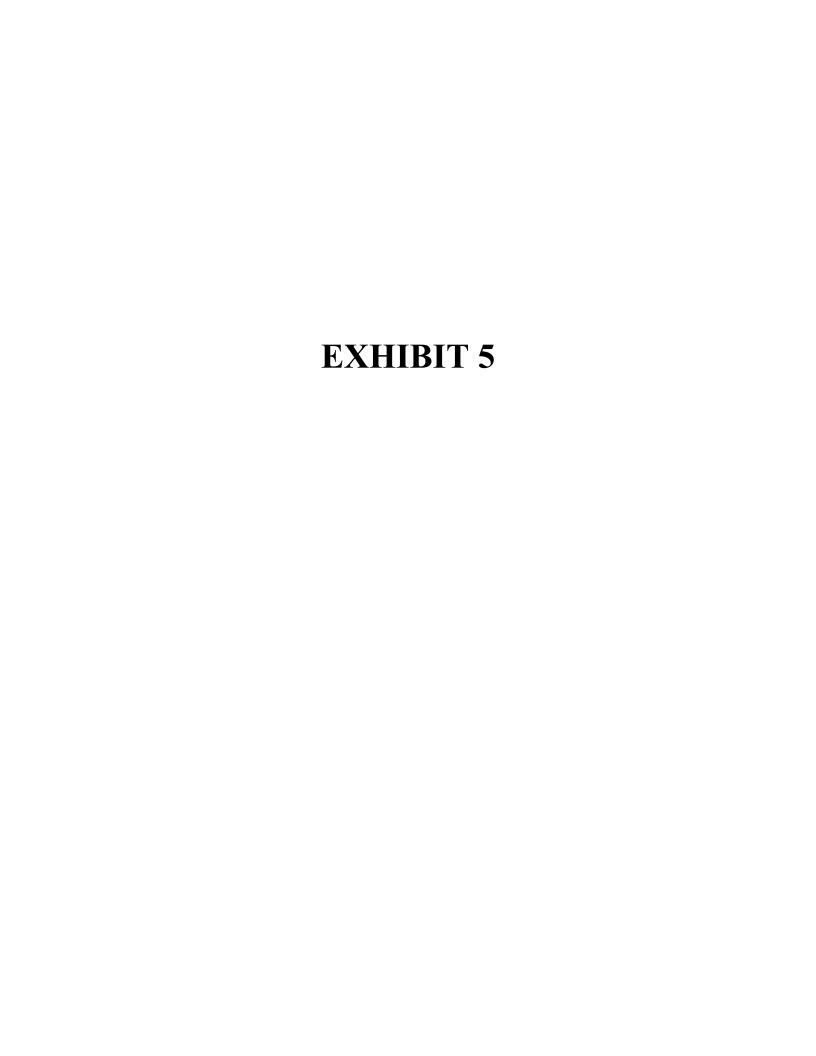
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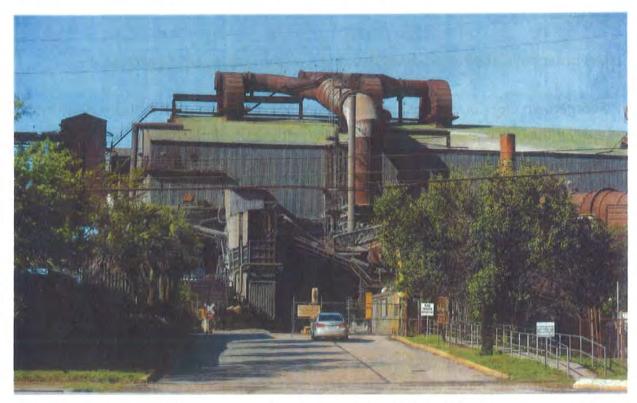


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TOP STORY

## Liberty House says it's closing in on Georgetown steel mill purchase

By David Wren dwren@postandcourier.com Aug 8, 2017



The Georgetown steel mill, which has found a tentative buyer in London-based Liberty House Group, has been idled since August 2015. File/Grace Beahm/Staff

**Buy Now** 

The U.K. metals manufacturer that wants to buy the shuttered Georgetown steel plant is weeks from closing on the transaction, a spokesman told The Post and Courier, but the company is worried that a plan to rezone the property might scuttle the deal.

"It's been a long journey to get here, but we're very close to the end," said Gordon Spelich, spokesman for London-based Liberty House Group, which plans to buy the mill from ArcelorMittal for an undisclosed price. "We're moving forward with everything we need to do to get to the closing."

An ArcelorMittal spokeswoman did not respond to a request for comments.

Liberty House met last week with the United Steelworkers to begin drafting a work agreement with the union, which Spelich said should be finalized in a couple of weeks.

And concerns over the Port of Georgetown's ability to handle shipments of material to the mill have subsided, with assurances that barges can still navigate the fast-silting harbor.

The potential rezoning, however, would be a "show stopper," Spelich said.

Georgetown City Council has tentative plans to rezone the steel mill site away from heavy industrial use when it meets Aug. 17, although a final agenda won't be set until later this week. The city has worked with consultants on a plan to transform the property into a mix of housing, light industry and offices since ArcelorMittal shut down the facility two years ago.

Georgetown Mayor Jack Scoville said the city wants Liberty House to reopen the mill and would like to grandfather the company's use of the site into any rezoning plan. But if the mill closes again with Liberty House at the helm, that's it.

"We're not trying to impede the reopening," Scoville said, adding that the rezoning would let the city move ahead with redevelopment if Liberty House ever ceases production for more than a year.

"The mill has closed three times in the past decade and, quite frankly, there is a lot of uncertainty in the steel market," Scoville said. "Experts we've talked to say they are not optimistic about its success."

Spelich said any rezoning, including one with a grandfather clause, worries him.

"If we restart the facility successfully and things are going well, we don't want anything to impair our ability to run the facility and make money," he said. That includes a possible future sale to another steelmaker, which might not be allowed if the property is rezoned.

Scoville and Spelich said they plan to meet with other city officials next week to talk about plans for the site and the rezoning ultimately might not make it on the council's agenda.

James Sanderson, the local steelworkers' union president, has called a news conference for Wednesday afternoon to put pressure on city officials to delay the rezoning.

Meanwhile, Spelich said he met last month with Georgetown County and South Carolina officials to discuss incentives Liberty House might qualify for if it reopens the steel mill. Those would include tax credits for creating jobs and paying a reduced fee instead of property taxes to the county.

"We are just trying to get whatever is available to assist us in the restart," he said. "They want some additional information from us, and we're working on that now."

Brian Tucker, the county's economic development director, said the discussions are in "the very preliminary stages."

Adrienne Fairwell, spokeswoman for the S.C. Commerce Department, said Liberty House has not applied for any incentives through the Coordinating Council for Economic Development, but any discussions between the parties would be confidential.

Spelich also met with the State Ports Authority to talk about using the Georgetown port to transport materials to the mill site. Spokeswoman Erin Dhand said the authority told Spelich that the port "remains open for both warehousing and barge/vessel traffic" but is limited by its current 18-foot depth.

While Liberty has said it would like to see the port's harbor eventually dredged to its normal 27-foot depth, Dhand said "there is no real hope" that will happen because of the expense and lack of a funding source. She said the SPA also continues to talk with Georgetown officials about redevelopment of the port site, which is located adjacent to the steel mill.

Georgetown's port handled a record 1.68 million tons of cargo at its height in fiscal 1999, with shipments of wire rods produced at the steel mill accounting for more than half of that total. During the past fiscal year, which ended June 30, the Georgetown port handled about 7,400 tons of cargo.

Spelich said Liberty House would send scrap iron and other materials to Georgetown by barge from shipments made to deep-water ports in either Charleston or Wilmington, N.C.

Luxembourg-based ArcelorMittal, the world's largest integrated steel and mining company, has owned the Georgetown steel plant in some form since 2004.

Liberty House Group operates steel and aluminum factories in the United Kingdom, Middle East and Asia. The company has been on a buying spree in recent months, announcing plans to acquire a shipbuilding business in India, an automotive engine manufacturer in Europe as well as Tata Steel sites in the United Kingdom.

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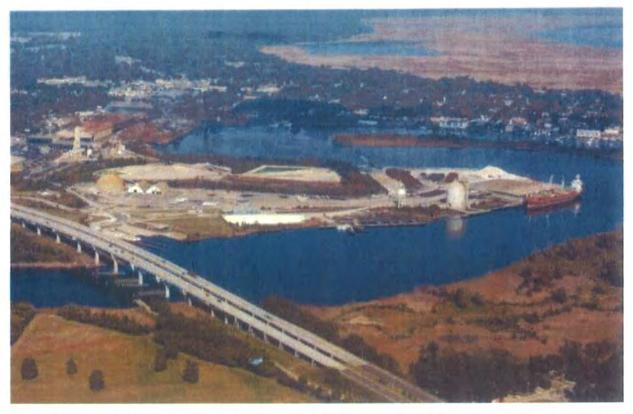
#### David Wren

http://www.postandcourier.com/business/as-steel-mill-sale-lingers-future-of-georgetown-sport/article\_c0246b30-6bf3-11e7-af8d-2790f65174a8.html

TOP STORY

# As steel mill sale lingers, future of Georgetown's port dims

By David Wren dwren@postandcourier.com Jul 18, 2017



The Port of Georgetown, operated by the State Ports Authority, has seen cargo dwindle over the past decade. File

While a potential buyer hopes to bring new life to the shuttered Georgetown steel mill, the adjacent port terminal appears to be in its final days.

"I think constructively so, yes," Jim Newsome, president and CEO of the State Ports Authority, said Tuesday when asked if Georgetown is near the end of its era as a port city. "The people there have some good ideas for what could be done with that land, and we've told them very clearly that we would support them in any way that we can." Georgetown officials and members of the Urban Land Institute, a land use think tank, last year approved a redevelopment plan for the port and steel mill sites that would include a mix of waterfront businesses, light industry and residences.

That plan was in the zoning stages when London-based Liberty House Group said in April that it wants to buy the mill from ArcelorMittal, which closed it in 2015. That announcement put the redevelopment on hold, although Liberty House has not closed on the deal and wants incentives from local and state governments before it moves forward.

Regardless of the mill's future, Newsome said the Port of Georgetown — which handles breakbulk, or non-containerized, cargo — is no longer economically feasible.

The Army Corps of Engineers estimates it will cost more than \$70 million to dredge the fast-silting harbor to its maximum 27-foot dept, and it will take another \$6 million per year to keep the navigation channel cleared.

"The federal government is not going to pay for that," Newsome said.

Georgetown's port handled a record 1.68 million tons of cargo at its height in fiscal 1999, with shipments of wire rods produced at the steel mill accounting for more than half of that total. During this past fiscal year, which ended June 30, the Georgetown port handled about 7,400 tons of cargo.

In contrast, the authority's Port of Charleston set a record this past fiscal year by moving 1.21 million cargo containers through its terminals.

Liberty House has had limited discussions with Georgetown officials and it's not clear when a sale might be finalized and the mill reopened. James Sanderson, local president of the United Steelworkers union, said he had hoped the mill would be open by now and employing up to 350 workers.

"We are going through a process and consulting with various stakeholders," Liberty House spokesman Eoghan Mortell told the Georgetown Times. "Things are heading very much in the right direction, and we are looking forward to reopening the plant when this process is complete."

While the Georgetown port will continue to operate for the time being, Newsome said he looks forward to working with the community on its eventual redevelopment.

"I think we have been pretty good partners in places where our ports exist," Newsome said. "We are conscious that we co-exist with nice communities."

The city of Georgetown said on its website that it "became an official port of entry in 1732."

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## David Wren

## Opinion

http://www.postandcourier.com/opinion/letters\_to\_editor/letter-georgetown-steel-response/article\_126effb6-29e3-11e7-9c83-9f3b3cd4db3b.html

## Letter: Georgetown Steel response

Apr 25, 2017

In a letter to the editor April 24, Keith Nagel of ArcelorMittal discussed the pending

rezoning of the Georgetown Steel Mill. Unfortunately, Mr. Nagel failed to accurately reflect the process that the City of Georgetown has undertaken, the role of the Planning Commission or the process going forward.

ArcelorMittal announced in May 2015 that they were permanently closing the Georgetown Steel Mill. In September 2016, the city began steps to participate in its

own destiny by changing the land use element for the steel mill and adjacent properties in the City's Comprehensive Plan. The land use for these properties was changed by City Council from heavy industrial to mixed use in the Fall of 2016. It was then, that the City of Georgetown began work on the text amendment for this mixed use zoning.

After months of diligent work on this

zoning text amendment, it was presented to City Council at their March 16, 2017 meeting. At that same meeting, City Council passed a resolution that directed the Planning Commission to hold a public hearing on the proposed zoning change and make a report and recommendation back to City Council.

Mr. Nagel's comments are misleading in that the Planning Commission does not rezone property as it is only a recommending body. Only City Council has the power to rezone property, and whatever the ultimate decision may be will lie with them.

The rezoning of the steel mill and adjacent properties will require two readings of

City Council. The first reading will not take place before the regular City Council meeting on the third Thursday in May, four weeks from now.

This rezoning process has been ongoing since September 2016, and it has been done at

public meetings with ArcelorMittal's knowledge. The City of Georgetown is simply following the prescribed steps by state statutes and city codes to accomplish this most important step for the city's future.

City officials have reached out to Liberty House Group to open a dialogue regarding its

plan for the mill, a timetable for the reopening, and ways the city may assist the company while protecting the interests of all the citizens of the city.

As of this writing, Liberty House Group has

not communicated with any city, county, or state officials about their plans for the site.

The City of Georgetown looks forward to working with Liberty House Group on this most important project.

Jack Scoville, Jr.

Mayor

City of Georgetown

Paul Gardner

City Administrator

City Hall

Georgetown

http://www.postandcourier.com/business/georgetown-steel-plant-finds-buyer-might-return-to-production/article\_073eebdc-2683-11e7-b965-9b94236cf4ea.html

TOP STORY

# Georgetown steel plant finds buyer, might return to production

By David Wren dwren@postandcourier.com Apr 21, 2017



The Georgetown steel mill, which has found a tentative buyer in London-based Liberty House Group, has been idled since August 2015. File/Grace Beahm/Staff

**Buy Now** 

When Vikrant Sharma shows up at a closed steel mill, it's usually because the facility long ago sighed its last breath.

In Georgetown's case, though, his visit represented a new lease on life.

The sale of ArcelorMittal's mill along the Sampit River to London-based Liberty Hall Group, announced Friday, is largely the result of Sharma's insistence that the plant — idled since August 2015 — could be saved.

"I saw a couple of advantages," Sharma said of a visit he made to the Georgetown site last summer. "They had just recently shut down, none of the equipment was missing or had been cannibalized, and the workforce was still readily available."

Sharma's business — Sherman Steel of Pittsburgh — typically buys steel equipment piecemeal, either for resale, spare parts or scrap. In this case, Sharma took one look at the Georgetown plant and got on the phone to his friends at Liberty's headquarters.

"They've been in an expansion mode the last couple of years and they were looking for acquisitions in the United States," Sharma said, adding that his recommendation led to months of negotiations between the London steel firm and ArcelorMittal, which has owned the Georgetown plant in some form since 2004.

No sale price was announced, and plenty of details must be worked out. But Liberty's purchase could bring production back to the Georgetown mill by mid- to late-June, said James Sanderson, president of the United Steelworkers union's local office. It would be Liberty's first U.S. acquisition.

The plant had about 220 employees when it shut down and Sanderson said he thinks it could employ as many as 350 workers and contractors at full capacity. Typical production floor wages ranged from \$60,000 to \$80,000 a year before the most recent shutdown, he said.

"We are extremely grateful that Liberty House has decided to move forward with purchasing our steel mill here in Georgetown," Sanderson said Friday. "And we owe a debt of gratitude to Vikrant Sharma for coming here, seeing the condition of our plant and relaying that information to Liberty."

ArcelorMittal said in a statement early Friday that the sale of the 600,000-square-foot facility hinges on the two sides agreeing on final terms and the completion of due diligence by Liberty over the coming weeks.

"We are pleased to have an agreement in principle with Liberty House on the sale and restart of our former wire rod mill in Georgetown," John Brett, president and CEO of ArcelorMittal USA, said in the statement. "We have achieved our goal of identifying a purchaser with extensive steel experience and a commitment to returning this site to its steel-making capability."

Sanjeev Gupta, executive chairman of Liberty House, called the announcement "a landmark day for Georgetown and its residents."

"Our agreement in principle with ArcelorMittal opens the door to the eventual restoration of several hundred jobs, both directly and in the supply chain, and it gives this region's economy a new industrial focus," Gupta said in a statement.

Georgetown Mayor Jack Scoville pre-empted the official news by announcing the proposed sale at a City Council meeting Thursday night. Scoville, who has been a proponent of redeveloping the roughly 60-acre mill site into a smokestack-less mix of professional and commercial businesses catering to residents and tourists, could not be reached for comment Friday.

The mayor told South Strand News that plans to rezone the site to accommodate a mixed-use vision — the result of brainstorming sessions held last year by the Urban Land Institute — will go forward. Such zoning, proposed by the city, would have a "grandfather clause" allowing a steel mill only if new ownership begins operations within one year.

Jim Newsome, president and CEO of the State Ports Authority, said it is too early to speculate about what impact a reopened steel mill could have on the adjacent Port of Georgetown. The mill once was the port's largest customer, accounting for almost

three-fourths of the 1.5 million tons of cargo moved through the facility in 1996. Steel shipments tapered off in succeeding years and the mill's closure has put the port's future in doubt.

Friday's announcement comes a day after President Donald Trump launched a trade probe against China and other exporters of cheap steel into the U.S. market. China is accused of illegally subsidizing steel manufacturers who make far more product than the country can use and then dumping excess steel on foreign markets, undercutting prices charged by domestic manufacturers.

"Steel is critical to both our economy and our military," Trump said during a ceremony Thursday with executives from U.S. steelmakers. "This is not an area where we can afford to become dependent on foreign countries."

It's a message that resonates with Sanderson, who said he believes Trump's tough trade policies helped woo Liberty to the United States.

"I want to thank President Trump for making this possible," Sanderson said. "There's no doubt in my mind that his stance on supporting American jobs has stopped the dumping of steel products into this country."

Sharma said he agrees that Trump's policies, including plans to boost infrastructure spending while using only American-made steel, has given the U.S. steel industry a jolt.

The Georgetown plant would be the second that Sharma has helped to save. In January, the former Wheeling-Pittsburgh Steel Corp. mill in Mingo Junction, Ohio, which had been shuttered for eight years, said it will start making hot metal again. Sharma and his father, Sherman International Corp. CEO Om Sharma, helped broker a sale of that business to the private Acero Junction Inc.

"We're confident that, with the right support from the community and authorities, we can make Georgetown and other U.S. steel plants competitive, profitable and sustainable," Gupta, the head of Liberty, said in a statement.

Georgetown steel plant finds buyer, might return to production | Business | postandcourier... Page 5 of 5

Sanderson said he hopes to invite Trump to attend a grand reopening when the Georgetown mill starts producing wire rods again in the coming months.

"Trump has sent the message loud and clear: He does not want to see our jobs go away," Sanderson said. "He wants to make American great again. By Liberty coming here, we're going to make Georgetown great again."

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David Wren

## **Opinion**

http://www.postandcourier.com/opinion/commentary/could-a-steel-mill-revival-pose-a-risk-to-georgetown/article\_77861322-05ca-11e7-86f1-3b77683bacd8.html

## Could a steel mill revival pose a risk to Georgetown's waterfront plans?

Mar 11, 2017

BY JOHN M. BURBAGE

GEORGETOWN — Heavy industry has obscured this port city's venerable Historic District for eight decades, but the closing of the ArcelorMittal steel mill in 2015 and news that adjacent state port facilities are shutting down have sparked hope that the dark clouds are finally lifting.

The closures would free up more than 150 acres of waterfront property at the western entrance to the 287-year-old town from Front Street south to the U.S. Highway 17 bridge across the Sampit River. Although the cost of the mill's removal and industrial cleanup is anybody's guess, changes now under consideration for redevelopment of the tract are stunning.

"The steel mill in Georgetown has reached the end of its road," Paige Sawyer, a former city councilman who lives downtown, said this week. "The property needs to be rezoned from heavy industry to mixed use. Smaller and cleaner manufacturing, retail, commercial and residential development could all benefit with this and at the same time provide needed employment in our area."

The unionized steel mill employed 226 people when it closed in July 2015, and the economic impact has been significant. The city reaped millions of dollars in taxes and water sales critical for municipal operations through the years. But all that money and more could be generated with proper redevelopment at the heart of the nation's fastest growing region.

Sawyer and other district residents note that the State Ports Authority could play a key role in the revitalization by making its property available to the city on generous terms. "The only way to successfully redevelop the area is to include the property that SPA owns and controls," he said.

But uncertainties remain. Mayor Jack Scoville said anonymous investors are lined up to obtain the tract, and the city has engaged the prestigious Urban Land Institute to steer redevelopment. ArcelorMittal, the world's largest steel-making conglomerate, announced months ago that its shuttered Georgetown mill would not reopen, but included no details. The company broke its silence this week saying only that the property is for sale and ArcelorMittal would consider all offers.

Meanwhile, U.S. Secretary of Commerce Wilbur Ross Jr., a former owner of Georgetown Steel, stepped down this week as a principal director of ArcelorMittal's worldwide operation. Ross' recent confirmation as commerce secretary and President Trump's vow to renegotiate trade agreements with China — a major steel producer and return industrial jobs to the United States have not gone unnoticed here. Steel mill supporters are optimistic. Almost everyone else is politely remaining silent.

Adding to this love-hate drama is an announcement by the president of the local chapter of the U.S. Steelworkers Union that another producer has already made a deal with AcelorMittal to buy the mill, contract with the union and resume operations.

"The union has a contract with a company intent on buying the steel mill and the city leaders don't want people to know that — they are in denial," Local 7898 spokesman James Sanderson Jr. said last week. But he declined to identify the company and there has been no official union vote on a contract. He also said Trump's vow to renegotiate trade policies with China was instrumental in attracting the other steelmaker to Georgetown. "Unfair trade has always been an issue in the sustainability of our mill," he added.

The Urban Land Institute is conducting a series of public meetings while developing a comprehensive redevelopment plan for both the mill site and the port property. The planners stress it is critical that the public sector wastes no time providing incentives

and assurances of long-term participation, adding that a million people live within a 90-minute drive of Georgetown and spend an estimated \$14 million annually on retail goods.

The planners also suggested that the mill site would be an excellent location for a new city hall, library and farmer's market. This would dramatically improve the way passersby headed north on U.S. 17 perceive the city. Another use for a portion of the 150-acre waterfront property would be to create a "university village" that includes a higher-education campus and residential facilities.

While redevelopment of the waterfront would be transformative, the nearby International Paper Co. plant, which employs 600 people, will stay put. This mill — once the largest paper producer in the world — dominates the city's western skyline and has contributed significantly to both air and water pollution since opening in 1937.

International Paper was cited in 1986 for dumping toxic dioxins used in the blanching process into the Sampit River, and signs soon went up advising not to eat seafood taken from the river and portions of Winyah Bay. No one knows what happens to dioxin deposits disturbed during dredging, which surely contributed to the state's decision to close the port.

"That stench is the smell of money," remains a common refrain here when the wind blows the wrong way across the paper mill. But thanks to the prevailing weather pattern, the city's treasure trove of history on the ocean side of U.S. 17 are more often than not spared the rotten-egg aroma.

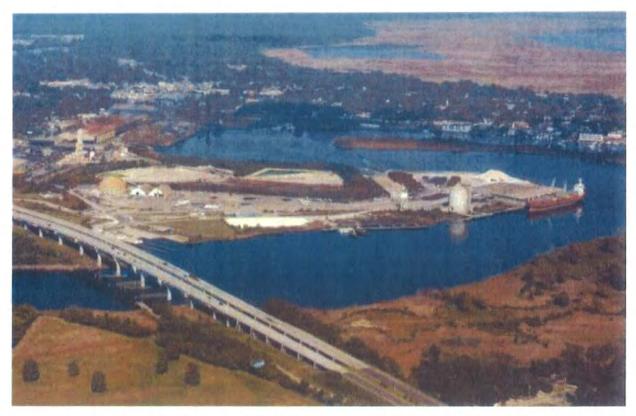
John M. Burbage is a former publisher of the Georgetown Times.

http://www.postandcourier.com/business/charleston-ports-agency-sees-six-figure-loss-at-georgetownfacility/article\_bf8a5a54-e7f5-11e6-8114-b7d7bf0a7e02.html

TOP STORY

## Charleston ports agency sees six-figure loss at Georgetown facility

By David Wren dwren@postandcourier.com Jan 31, 2017



The Port of Georgetown, operated by the State Ports Authority, lost nearly \$200,000 during the first half of fiscal 2017. File

Operating the Port of Georgetown has become a money-losing venture for the State Ports Authority, which notched a six-figure loss for the first half of fiscal 2017 at the breakbulk facility, which hasn't had any measurable cargo in months.

Costs outstripped revenues at the port from July 1 through Dec. 31, with the Port of Georgetown recording a \$182,741 loss for the period, according to financial figures the SPA released on Tuesday. That compares with a slight profit of \$20,754 for the same period a year earlier.

Most of the port's costs are fixed and must be paid as long as the facility is operating, said Jim Newsome, the SPA's president and CEO.

The port's cargo totals have been non-existent in recent months. While the Georgetown facility moved a combined 1,517 tons of cargo in July and August, the facility did not record any tonnage over the next four months. By comparison, the Port of Georgetown moved 196,981 tons of cargo through its two piers during the first half of the last fiscal year.

The drop is due to a single port customer having "a change in its business landscape," a SPA spokeswoman previously said.

The dwindling Georgetown numbers - well below the SPA's goal of 10,000 tons per month - make it unlikely the port would qualify for federal funds needed for maintenance dredging. Such funds typically are reserved for facilities with at least 1 million tons of cargo per year.

A separate effort to dredge the port's channel to its maximum 27-foot depth also appears in doubt. Georgetown County voters approved a local-option sales tax in 2014 to pay for infrastructure projects including dredging. The cost to deepen the harbor doubled since then, to \$66 million, and county officials now say the taxgenerated dredging dollars likely will be spent on other projects.

Without a deeper channel, SPA officials say it will be difficult to attract customers to the Georgetown port.

"Our strategy all along has been to continue aggressively marketing the port while considering its significant limitations relative to draft," Newsome said, adding the port recently secured some transload business that isn't dependent on the water's depth.

"We will continue this course of action for the foreseeable future," he said. "Equally, we have very clearly told the town that we will willingly cooperate with them if they have greater aspirations that would include our port property."

The decline comes at a time when Georgetown area leaders are looking for ways to redevelop the port and the adjacent ArcelorMittal steel mill that closed in 2015. The SPA has said it would close the port so it can be included in a reuse plan but there is no timetable for that closure. The steel mill once was one of the Georgetown port's largest customers.

In September, the Urban Land Institute, a nonprofit that promotes responsible land use, sponsored a week-long series of meetings to brainstorm ideas for revitalizing the 150-acre waterfront site of the mill and port. A plan was formed to create "an incubator for entrepreneurs, businesses and sectors that will help diversify the economy and forge a new economic destiny for Georgetown," according to the group's website.

The Port of Georgetown is located about 60 miles up the coast from the SPA's Charleston headquarters. By contrast, the maritime agency's operations in Charleston posted earnings of more than \$22 million through the first six months of fiscal this fiscal year - a 13 percent increase over the same period a year earlier.

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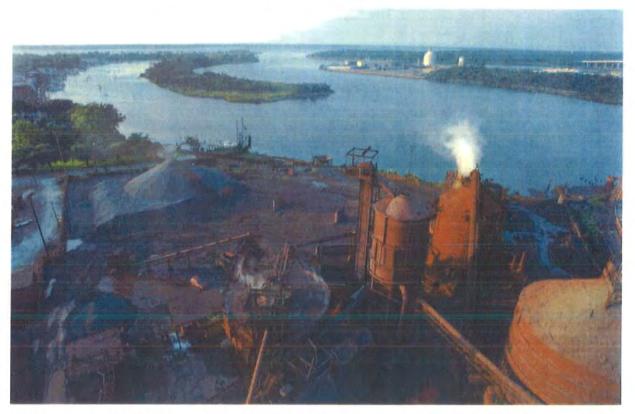
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http://www.postandcourier.com/business/no-timeline-but-spa-agrees-to-shut-georgetown-port-under/article\_598b9958-e272-11e6-876f-d34529e35446.html

TOP STORY

# No timeline, but SPA agrees to shut Georgetown port under reuse plan

By David Wren dwren@postandcourier.com Jan 24, 2017



The former ArcelorMittal steel mill sits along the Sampit River near Georgetown's historic district. File

**Buy Now** 

The State Ports Authority has agreed to close its struggling Port of Georgetown so local governments can include it in a redevelopment plan to replace the city's idled steel mill with a mixture of waterfront businesses and light industry, officials said Tuesday.

The redevelopment efforts are in the early stages and there is no timetable for the port's closure, said Clint Eisenhauer, the SPA's senior vice president for external affairs. Eisenhauer said the breakbulk facility along the Sampit River about 60 miles north of Charleston will continue to operate for the foreseeable future, but it makes sense for the property to be included in a reuse plan.

"It allows for a more integrated project as opposed to a developer having to carve out parcels," he said.

Georgetown's city and county governments are moving forward with a joint agreement that specifies what steps they will take to spur redevelopment of the steel mill site, including possible creation of special tax districts and annexation of the SPA's property. Georgetown City Council approved the agreement last week, and Georgetown County Council was scheduled to discuss it Tuesday.

However, Georgetown Mayor Jack Scoville said redevelopment efforts are being thwarted by mill owner ArcelorMittal

"We've tried to get them to come to the table, but they won't communicate with us," Scoville said of the Luxembourg-based steel giant. Scoville said the last time the city heard from the company was in June.

An ArcelorMittal spokeswoman did not respond to The Post and Courier's requests for comments. The company closed the Georgetown mill in August 2015, leaving 226 people without jobs. The shutdown has cost the city about \$500,000 in annual tax and business license revenue.

In September, the Urban Land Institute, a nonprofit that promotes responsible land use, sponsored a week-long series of meetings to brainstorm ideas for revitalizing the 150-acre waterfront site of the mill and port. A plan was formed to create "an incubator for entrepreneurs, businesses and sectors that will help diversify the economy and forge a new economic destiny for Georgetown," according to the group's website.

Scoville said there are "serious and very capable developers who want to purchase the property," but they cannot get a response from ArcelorMittal.

"It's a tremendous opportunity, but for whatever reason the company won't talk to us," Scoville said. "It's frustrating."

Scoville said local governments want to include the port property in any redevelopment plan because its ongoing operation as maritime facility "is not feasible."

The fast-silting harbor makes it difficult for ships to visit the port and it will take \$66 million - money the federal government says it doesn't have - to deepen the channel to its maximum 27-foot depth.

"Frankly, the ports authority would be happy to get rid of the property and focus on Charleston," Scoville said.

Eisenhauer said the SPA, which also operates the Port of Charleston, would be in favor of Georgetown annexing the port for redevelopment because the city could then generate tax revenue from the property. The SPA, a state agency, does not pay taxes. Any annexation would have to be approved by the State Fiscal Accountability Authority.

The Port of Georgetown's fortunes mirrored the adjacent steel mill, which was among the facility's biggest customers when it was one of the country's leading wire rod producers. The port was handling 1.8 million tons of material at the turn of the century, but that number declined to 265,000 pounds in 2008.

During the first two months of fiscal 2017, which started on July 1, the Port of Georgetown handled just 1,517 tons of cargo. That was down from 88,521 tons moving across the terminal during the same period a year earlier.

Reach David Wren at 843-937-5550 or on Twitter at @David\_Wren\_

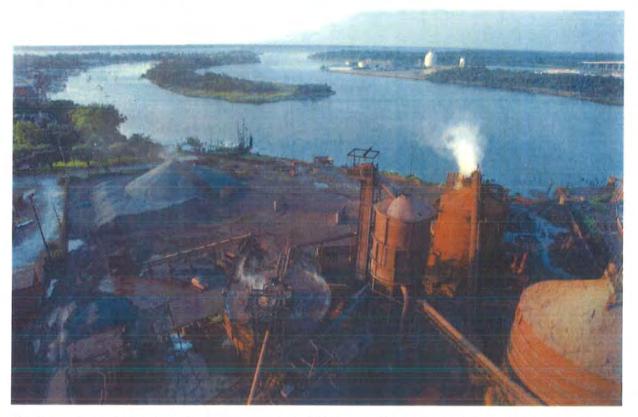
No timeline, but SPA agrees to shut Georgetown port under reuse plan | Business | postan... Page 4 of 4

#### David Wren

http://www.postandcourier.com/business/old-steel-mill-site-to-get-new-purpose/article\_809917a7-2717-5554-b1b6-1a702cb18664.html

## Old steel mill site to get new purpose

David Wren Jun 7, 2016



The former ArcelorMittal steel mill sits along the Sampit River near Georgetown's historic district. File

**Buy Now** 

Experts with the Urban Land Institute will meet with Georgetown area political and business leaders by early fall to plot a strategy for redevelopment of the former ArcelorMittal steel mill located adjacent to the coastal city's historic waterfront district.

The mill, situated on a roughly 60-acre parcel hugging the Sampit River, was shuttered about a year ago — the victim of cheap Chinese-made steel flooding world markets and declining demand for the wire rods it produced. The financially troubled plant, which opened in 1969, had experienced a series of shutdowns and ownership changes before ArcelorMittal closed it for good in August, laying off 226 workers.

Now, city and county leaders say they want to find a way to put the property back to use.

"The waterfront is core to our history and is an important part of our local economy," Georgetown Mayor Jack Scoville said in a statement. "The city has a once-in-a-lifetime opportunity to reposition this asset into a sustainable use that will enhance and benefit the entire city for future generations."

A spokesman for property owner ArcelorMittal did not respond to a request for comments.

The Washington, D.C.-based Urban Land Institute will send a group of land-use experts to visit the Georgetown site for five days in September. They also will meet with area politicians, architects, developers, financiers and others to brainstorm ideas "for economic development possibilities … that would benefit not only the city, but the greater Georgetown region," said Tee Miller, economic development director for the city.

Prior to the visit, the Urban Land Institute and the local panel will review a range of Georgetown-specific reports on jobs, housing, infrastructure, transportation and growth.

The effort, coordinated by the Frances P. Bunnelle Foundation, is expected to culminate in a public report detailing suggestions for the property's redevelopment.

"The independent views of the panelists bring a fresh perspective to the land-use challenge," said Tom Eitler, the Urban Land Institute's senior vice president for advisory services. "The advisory services program is about offering creative, innovative approaches to community building."

Georgetown County also is supporting the initiative, said Sel Hemingway, county administrator.

"Georgetown County recognizes the value of a vibrant waterfront in the city extends

far beyond the city limits," Hemingway said.

Brian Tucker, the county's economic development director, said the steel mill's closing has put the area "at a crossroads."

"The direction of this community will be significantly impacted by the future use of this site," Tucker said, adding the land institute panel "provides the best opportunity to objectively determine the highest and best use of the property to ... offer the greatest economic impact for everyone."

The redevelopment also could include the Port of Georgetown, a breakbulk facility that has seen declining usage in recent years due to the mill's closure and other factors. Those talks are in the early stages and no final decisions have been made.

The State Ports Authority, which owns the marine terminal next to the mill site, "is supportive of the discussions about potential redevelopment in the region, but at this point they are very preliminary and there are no defined plans related to the Port of Georgetown," spokeswoman Erin Dhand said.

Those looking to redevelop the steel mill site say those efforts could be hindered if the port property is not included.

The Urban Land Institute has developed more than 600 studies for a broad range of redevelopments, including waterfront properties. Eitler said one of the group's strengths is its ability to draw on the knowledge and experience of its more than 38,000 members.

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http://www.postandcourier.com/business/georgetown-port-in-a-storm/article\_8b7b7552-26e4-5a71-b3cc-f3397d16ebb5.html

## Georgetown port in a storm

David Wren Dec 4, 2015



The Port of Georgetown handles so-called breakbulk cargo, such as this shipment of petroleum coke.

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Changes in cargo shipping patterns, stricter federal rules for annual maintenance dredging and the closure of Georgetown's steel mill could force state officials to shut down the coastal city's seaport, despite residents' attempts to save the struggling maritime facility.

State legislators who oversee the State Ports Authority last week questioned whether the Georgetown port can remain viable in the face of those challenges, particularly since the fast-silting Georgetown Harbor limits the types of ships that can use the port.

"It is a very challenging proposition by any stretch, and we do the best we can," Jim Newsome, the SPA's president and CEO, told the legislative review and oversight commission during a meeting in Mount Pleasant.

Georgetown Harbor has an authorized depth of 27 feet, but its current depth is between 18 feet and 20 feet because no one has the \$5 million to \$6 million it will take every year to maintain the maximum that's allowed.

These days, the port — which handles noncontainerized cargo known as breakbulk — mainly is used by barges shipping products for cement companies. The annual tonnage of overall shipments has been steady in recent years — between 450,000 and 600,000 — but well below the 1-million-ton threshold needed to qualify for federal dredging funds.

The Office of Management and Budget is expected to raise that threshold to as much as 5 million tons per year, so the lion's share of federal dollars will be directed to fewer harbors with more tonnage.

Georgetown County voters last year approved a local-option sales tax that will, among other things, raise \$6 million over the next three years to help dredge the harbor back to its 27-foot depth. But that referendum was passed before a new Army Corps of Engineers estimate for the project nearly doubled the cost — to about \$60 million.

The state Legislature also set aside \$5.25 million to help restore the harbor's depth. That money has not been spent and Sen. Larry Grooms, R-Charleston, questioned whether it should still be used for that purpose.

"Even if we spend the money to dredge it out, we cannot count on the federal government to maintain it," Grooms said, adding that the General Assembly should consider taking back the money and using it for other projects.

Sel Hemingway, Georgetown County's administrator, said the dredging project likely would be canceled if the state took back its share.

Georgetown County Council recently borrowed \$28 million against the local-option sales tax revenue so it can more quickly begin a list of road and public works projects. Hemingway said port dredging might be moved to the end of that list while officials wait to see what funding ultimately is available.

If the dredging never occurs, Hemingway said, the sales tax money earmarked for the project might be available for another use.

Hemingway said the closing of the ArcelorMittal steel mill in August forced residents and politicians to rethink how that property and the port might be redeveloped. The mill had been one of the port's biggest customers, and SPA officials were counting on it to raise the port's tonnage beyond 1 million per year.

"There are a lot of opinions, but this gives us an opportunity to look at redevelopment," Hemingway said. "There are efforts underway to ensure we have an objective type of assessment of how that entire property should be developed."

Newsome said the steel mill's closure "makes a difficult scenario even more difficult," adding that the state's money might be better spent elsewhere.

"We thought that if we could routinely get over 1 million tons it was worthwhile," Newsome said. "I think the question today is finding a scenario where you could get 1 million tons without the steel mill."

Grooms said even if that were to happen, there's no guarantee federal dollars would follow.

"We believe that (maintenance dredging) would be a federal obligation and responsibility, and it's very likely that they will not do that," the lawmaker said.

Grooms said the Port of Georgetown might be similar to the SPA's Port Royal property, a former small cargo terminal in Beaufort County that was closed in 2004 after changes in shipping patterns sent business to larger ports. The SPA has a contract with a Greenville developer that wants to purchase the site, but the \$15.4 deal has not yet closed.

"Some of the breakbulk cargo that you would see flowing through the Port of Georgetown is now being transloaded into containers, and Georgetown is not a container port," Grooms said. "There are still some breakbulk products that could move through there — wood products and cement — but I don't believe the tonnage would be enough that the federal government would maintain that channel."

The smaller vessels capable of calling on Georgetown restrict trade opportunities to nearby regions, primarily Canada, Mexico, the Caribbean and northern parts of South America.

"It's a very similar pattern to what happened down at Port Royal," Grooms said. "The ability for that to be a viable port changed when shipping patterns and the type of cargo that could be handled changed."

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