Federal Excise Tax on Tires: Where the Rubber Meets the Road

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Summary

The excise tax on tires was first levied in 1918 mainly because of revenue needs brought about by World War I. The tax was reduced after the war, and then repealed in 1926. The levy was reintroduced during the Great Depression at a time when federal individual income tax revenues were plummeting, and was increased to help finance World War II. A general reduction in rates was in the offing just before the outbreak of the Korean conflict but revenue needs brought about by that war prevented the lowering of rates. More recent history shows that in 1956 the rate of the tax was raised in response to legislation enacted to build the interstate highway system and to create the Highway Trust Fund. Scheduled reductions did not occur after the construction of the interstate highway system had been extended. A goal of the Surface Transportation Assistance Act of 1982 was to redistribute highway costs between car and truck users. At that time, the tax structure was changed so that the tax was imposed only on heavy tires with tax rates that are graduated, and increased along with the tire’s weight. The Taxpayer Relief Act of 1997 repealed the exclusion of the value of the tires from the 12% retail excise tax on heavy highway trucks, trailers, and tractors, but provided a credit offset to the retail tax for the tire tax paid. Under the American Jobs Creation Act of 2004 the tax based on tire weight was replaced with rates based on the load capacity of the tire. The federal excise tax imposed on tires is now scheduled to expire on October 1, 2011.

Today, the premise for the excise tax on tires is that heavier vehicles cause greater damage to both roadways and bridges, and that the excise tax on tires resembles a pricing mechanism that is a proxy for highway wear-and-tear charges. This premise still holds true as load capacity must exceed 3,500 pounds before the tax is imposed, thus exempting tires on lighter vehicles. Tire excise taxes still produce revenues for the Highway Trust Fund and repeal of the existing tax would require additional taxes to be imposed on other sources so as to provide an equivalent amount of revenues to build and maintain roadways. This excise tax is said to be easy to administer with minimal federal collection costs.

Several arguments are advanced against the imposition of the tire tax. First, some view this selective excise tax as discriminating against the tire and related industries whose products are taxed and also the trucking industry, which depends on the product. The commercial truck transportation industry pays this tax while competitors such as railroads and waterways have no corresponding excise tax, thus creating an intermodal equity issue. Second, to the extent that the excise tax on tires is passed forward into the cost of goods sold, it places a burden on lower income individuals since individuals with lower incomes, relative to those with higher incomes, tend to spend a larger portion of their income for the same consumption amount (thus, to the extent that the tax is passed forward to consumers, the tax is regressive).

The authors intend to update this report in the future to reflect legislative changes and collection figures.
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Legislative History and Rationale

A history of the federal excise tax on tires shows that initial adoption occurred as a result of the revenue needs of World War I with the inclusion of the tax in the Revenue Act of 1918.\(^1\) This act imposed the tax on both tires and tubes at the rate of 5% of the retail price. At the conclusion of the war, certain fiscal problems of the United States remained and because of revenue needs, the excise tax was extended at the same rate by the Revenue Act of 1921.\(^2\) As the financial condition of the country improved, the tax was first reduced from 5 to 2 ½ percent by the Revenue Act of 1924\(^3\) before being repealed by the Revenue Act of 1926.\(^4\)

Today’s excise tax derives from the re-institution of the tax (at 2 1/4 cents per pound on tires and 4 cents per pound on inner tubes) by the Revenue Act of 1932.\(^5\) The 1932 Act changed the structure of the tax, from a tax on price to a tax on weight. The First Revenue Act of 1940\(^6\) raised the tax rates to 2 ½ cents and 4 ½ cents per pound, respectively. The reintroduction of the excise tax and increase in rate was primarily brought about to make up for the reduction in revenues from income taxes caused by the Great Depression. At that time, the excise tax on tires and tubes was not viewed as a hardship on business.

The Revenue Act of 1941\(^7\) increased the tax rates from 4 cents to 9 cents on tubes and from 2 1/4 cents to 5 cents on tires. (Various excise tax rates were increased as a part of a general increase in taxes during the World War II period.) There were no rate changes in 1943. However, the Revenue Act of 1943\(^8\) redefined rubber to include synthetic and substitute rubber and later the rates were codified in the Internal Revenue Code of 1954.\(^9\)

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\(^1\) Revenue Act of 1918, P.L. 254, 65\(^{th}\) Cong., approved Feb. 24, 1919.
\(^2\) Revenue Act of 1921, P.L. 98, 67\(^{th}\) Cong., approved Nov. 23, 1921.
\(^3\) Revenue Act of 1924, P.L. 176, 68\(^{th}\) Cong., approved June 2, 1924.
\(^5\) Revenue Act of 1932, P.L. 154, 72\(^{nd}\) Cong., approved Feb. 6, 1932.
\(^6\) Revenue Act of 1940, P.L. 656, 76\(^{th}\) Cong., approved June 25, 1940.
\(^7\) Revenue Act of 1941, P.L. 250, 77\(^{th}\) Cong., approved Sept. 20, 1941.
\(^8\) Revenue Act of 1943, P.L. 235, 78\(^{th}\) Cong., approved Feb. 25, 1944.
The Federal-Aid Highway Act of 1956\(^{10}\) provided for a significant expansion of the federal-aid highway program and authorized federal funding over a longer period of time so as to permit long-range planning. It was considered necessary to authorize the entire Interstate Highway program to assure orderly planning and completion of this network of highways throughout the United States as efficiently and as economically as possible. In the case of tire taxes, the act raised certain rates and expanded the rate structure by prescribing different rates for different tire types. Tires for highway vehicles were taxed at 8 cents per pound, other tires at 5 cents per pound, inner tubes at 9 cents per pound, and tread rubber at 3 cents per pound. From that time forward, proceeds from tire excise taxes have been transferred to the Highway Trust Fund established by that act. The act provided for a rate reduction in 1972, which was rescheduled because the interstate highway system was still under construction.

In 1960, an act called Excise Tax: Laminated Tires\(^{11}\) provided a lower tax rate of 1 cent per pound for laminated tires which “consist wholly of scrap rubber” and “not of the type used on highway vehicles.” Congress recognized that the very heavy weight of laminated tires disadvantaged this new small industry since the tax represented nearly 20% of the retail cost of the tire.

The excise tax rates on tires were once again changed in 1961.\(^{12}\) This time the Federal-Aid Highway Act of 1961\(^{13}\) provided excise tax rate increases to 10 cents per pound for highway vehicle tires (up 2 cents per pound); 10 cents per pound for inner tubes (up 1 cent per pound); and 5 cents per pound of tread rubber (up 2 cents per pound). Rates of 5 cents per pound for other than laminated and 1 cent for laminated tires were left intact without change. Again, rate reductions were scheduled for 1972. Three subsequent public laws (P.L. 91-605, P.L. 94-280, and P.L. 95-599)\(^{14}\) postponed the scheduled rate reductions first from 1972 to 1977, then from 1977 to 1979, and finally from 1979 to 1984. Thus, as the Highway Trust Fund was extended, so too were the excise taxes that financed the national highway system.

A reduction in the rate of the tire excise tax of 2.5% was part of the Determination of Second Tier Taxes enacted in 1980.\(^{15}\) The provision reduced the tax rate applicable to new highway tires to 9.75 cents per pound and for non-highway tires to 4.875 cents per pound. The law also phased out credits and refunds of tire excise taxes made pursuant to a warranty or guarantee after 1982. The purpose of

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\(^{10}\) Highway Revenue Act of 1956, P.L. 627, 84\(^{th}\) Cong., approved June 29, 1956.


\(^{12}\) In “real” terms—that is, after adjusting for inflation—these rates were far lower than the original levies in the 1930s.


making these changes was to simplify collection procedures without significantly affecting overall tax receipts.

In an effort to stimulate job creation, the Congress passed the Surface Transportation Assistance Act of 1982.\(^{16}\) One of its goals (besides increased revenues for construction and maintenance of the Nation’s highways) was a redistribution of highway costs between car and truck users. Accordingly, the act changed several of the excise taxes that fund the Highway Trust Fund. For example, the excise taxes on tread rubber and inner tubes were repealed as were the taxes on nonhighway and laminated tires. A new tax structure for heavy tires with graduated excise tax rates dependent on tire weight was established. Tires which weigh less than 40 pounds were exempted from excise tax so that tires for most passenger cars are no longer taxable. The excise tax rates on heavy tires ranged from 15 to 90 cents a pound according to the weight of the tire. These rates are shown in the following table.

Table 1. Excise Tax Rates on Tires Under the Surface Transportation Assistance Act of 1982

<table>
<thead>
<tr>
<th>Weight of Tire</th>
<th>Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>0- 40 lbs.</td>
<td>No tax</td>
</tr>
<tr>
<td>40 -70 lbs</td>
<td>15 cents per lb. over 40 lbs.</td>
</tr>
<tr>
<td>70 -90 lbs.</td>
<td>$4.50 plus 30 cents per lb. over 70 lbs.</td>
</tr>
<tr>
<td>90 lbs.-up</td>
<td>$10.50 plus 50 cents per lb. over 90 lbs.</td>
</tr>
</tbody>
</table>

Source: H.Rept. 97-987, pp. 89, 184.

Included in the Tax Reform Act of 1984\(^{17}\) were minor refund provisions for tire stock and tread rubber floor stock. These provisions adjusted for taxes previously paid on dealer stock that had not yet been sold. From 1982 through the end of 2004, excise tax rates were not changed but various tax acts which have extended the interstate highway system have also extended the tire excise taxes.

An indirect change occurred to the federal tire excise tax under the Taxpayer Relief Act of 1997. The modification made by the act was in response to disputes occurring during tax audits. The tire excise tax is based on weight rather than as a tax on the retail selling price\(^{18}\). In addition to the federal tax on tires, there is a federal retail excise tax (12%) imposed on heavy highway trucks, trailers, and tractors. Since the tires were taxed separately, the tires’ retail sales value was not being included in determining the federal retail excise tax on heavy vehicles. Under the act, the value

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\(^{17}\) Tax Reform Act of 1984 (also know as the Deficit Reduction Act of 1984), P.L. 98-369, approved July 18, 1984.

\(^{18}\) See the discussion in the following section entitled Why Weight Instead of Sales Price?.
of tires was to be included in determining the federal retail sales tax. However, a credit for the amount of tire excise taxes paid was allowed against the retail sales tax on heavy highway vehicles. The change was effective as of January 1, 1998. The Joint Tax Committee estimated that this change would increase federal revenues by $452 million during the FY1997-2002 period and $979 million during the FY1997-2007 period. The excise tax on tires was last extended under the Surface Transportation Revenue Act of 1998.

The American Jobs Creation Act of 2004 changed the method of taxing tires from the graduated weight structure of prior law to a tax based on the load capacity of the tire. The tax is set at the rate of 9.45 cents for each 10 pounds of tire load capacity in excess of 3,500 pounds. In the case of super single or bias ply tires the tax rate is set at 4.725 cents for each 10 pounds tire load capacity in excess of 3,500 pounds. This change has been scored by the Joint Committee on Taxation as having a negligible impact on federal revenues. It was argued that the lower rate on super single or bias ply tires is justified since bias ply tires do not last as long and therefore must be replaced more frequently than radial tires. We are unaware of any studies which support or rebut this assertion. However, it is reported that bias ply tires are used to a greater extent on construction and farm equipment vehicles. Thus, while tires on these vehicles may carry the same heavy loads as radial tires, they often travel less frequently and for shorter distances on highways and thoroughfares which are supported by the tire tax. The American Jobs Creation Act of 2004 also provided that tires sold for the exclusive use of the Department of Defense or the Coast Guard would be exempt from the tax. A former exemption for tires with an internal wire fastening agent was repealed from the law.

A provision included in the Energy Tax Incentives Act of 2005 clarifies the definition of super single tires. Super single tires are those with a width greater than 13 inches. They are “designed to replace two tires in a dual fitment” and are subject to a lower tax rate of 4.725 cents for each 10 pounds load capacity exceeding 3,500 pounds. Under the clarification, a super single tire does not include tires designed to serve as steering tires since steering axles are not equipped with a dual fitment. The clarification was made effective as if included in the American Jobs Creation Act of 2004. The revenue effect was scored as being negligible. Also included in this legislation is a requirement that the Internal Revenue Service collect revenue data for each class of taxable tire beginning January 1, 2006. This report is to include

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22 The Department of Transportation requires that the tire load capacity be stamped on the side of highway tires. Administration is simplified since tire manufacturers, producers, importers and the Internal Revenue Service will no longer be required to weigh sample batches of tires to determine the tax.

23 The Conference Committee Report noted that recapped and retreaded tires are not to be subject to the tax.
revenue collections made from the tire taxes prior to the change in taxing load capacity. The report is scheduled to be submitted to Congress by July 1, 2007.

The tire excise tax is currently scheduled to expire on October 1, 2011. However, if one uses the past as a guide, it appears likely that the tax will see further extension.

**Recent Developments**

Congress continues to consider highway reauthorization proposals in the 109th Congress. While the highway, public transit and road safety projects funding levels expire on May 31, 2005, the federal excise tax on tires does not expire until September 30, 2005. The House of Representatives approved a $283.9 billion bill entitled the Transportation Equity Act: A Legacy for Users (H.R. 3) in a 417 to 9 vote on March 10, 2005. That legislation includes an extension of the tire tax through September 30, 2011.

Likewise, the Senate has passed its version of the bill entitled the Safe, Accountable Flexible, Efficient Transportation Equity Bill of 2005 (SAFETEA) in a vote of 89 to 11 on May 17, 2005. The Senate’s version of the bill adds $11.2 billion in additional revenues all of which is fully offset. It is argued that this additional revenue is needed so that all states will receive as much in federal highway aid as they pay in federal gasoline excise taxes. Like the House of Representatives, the Senate’s proposal would extend the tire tax through September 30, 2011.

The White House remains committed to the funding level proposed by the President in his FY2005 budget. The President’s senior advisors have recommended that he veto the legislation if his net funding authorization level ($283.9 billion over six years) is not met.24

**Why is the Tax Based on Weight or Load Capacity — Rather than Sales Price?**

There are two main reasons why the tax is imposed upon the weight or load capacity rather than the sales price of tires. At the time of World War II, there simply were no substitutes for rubber and no domestic rubber supply. Since rubber was a necessary commodity for the war effort, the imposition of this excise tax was used as a means to discourage domestic consumption. As such, the person using more rubber — and heavier tires — would shoulder a heavier tax burden than those persons conserving the valuable commodity.

In this manner, two objectives were accomplished. First, the purchaser would purchase tires with less rubber content and manufacturers were provided with an

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incentive to find alternate means of making tires with less rubber or with other substitutes. Synthetic tires were brought on the market shortly after this time. Ironically, an excise tax was placed upon these synthetic tires because the revenue needs of the country were still the primary motive for the excise tax on tires and tubes.

The second reason for basing the tax on weight or load capacity is that it is a manufacturer’s excise tax that is assumed to be passed forward to the eventual consumer. Administratively, the tax is much easier to collect from a few manufacturers than from the many dealers that sell tires. If sales price were used, then collection would have to be assigned at the point the consumer actually takes possession of the tire. Because of sales, trade-ins, etc., the tax would be more difficult to monitor and the number of firms collecting and, thus, remitting revenues to the Internal Revenue Service (IRS) would be much greater, resulting in greater administrative collection expense for IRS.

The proposed change from a weight based tax to a tax based on load capacity does not change the collection point of this manufacturers tax. As such, it should not affect the number of collection points. Thus, it is generally believed that it should not greatly affect the collection process.

**Assessment**

Because it funds highway construction, the excise tax on truck tires is often referred to as a “user tax.” It is generally held that heavier vehicles such as trucks cause greater damage to both roadways and bridges. Thus, the tax on heavy tires for trucks resembles a pricing mechanism with the tax viewed as a proxy for highway wear-and-tear charges. While these taxes now apply only to heavy tires, they still produce substantial amounts of needed tax revenues for the Highway Trust Fund. The repeal of tire excise taxes would require additional taxes to be imposed on other sources in order to provide equivalent amounts of income for the Highway Trust Fund. In its current form, this excise tax is easy to administer and, therefore, collection costs are kept to a minimum for the IRS.

Several arguments have been advanced against the continued imposition of this excise tax. First, excise taxes have traditionally been associated with luxury items. Early in this century, those owning automobiles (and thus, needing tires) were generally wealthy individuals. In contrast, in the modern economy, tires play a vital and necessary role in the overall transportation system and are no longer thought of as luxuries. Second, selective excise taxes discriminate against industries whose products are taxed. In this case, the commercial trucking industry must pay this excise tax while the chief competitors of truck transportation, namely the railroads and waterways, have no corresponding excise tax. Thus, a question of intermodal equity arises. Finally, as noted earlier, excise taxes have their greatest impact on lower income individuals and are not based on the ability-to-pay principal. To the extent that the excise tax on truck tires is passed forward in the cost of goods sold, it places the greatest burden on lower income individuals because individuals with
lower incomes tend to spend a larger portion of their income on these goods in contrast to individuals with higher incomes.

Revenues

As noted, revenues collected from the federal excise tax on tires are dedicated to the Highway Trust Fund. The table (appearing on the following page) provides an historical review of those revenue collections. Early years include tax receipts collected from the excise tax on inner tubes and tread rubber as well as the tax on tires. Today, revenues from the excise tax on tires provide less than 2% of the Highway Trust Fund receipts.
## Table 2. Excise Tax Collections on Tires, Tubes, and Tread Rubber
(in nominal dollars)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Collections (in thousands of dollars)</th>
<th>Fiscal Year</th>
<th>Collections (in thousands of dollars)</th>
<th>Fiscal Year</th>
<th>Collections (in thousands of dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1933</td>
<td>14,980</td>
<td>1956</td>
<td>177,872</td>
<td>1984</td>
<td>417,973</td>
</tr>
<tr>
<td>1934</td>
<td>27,630</td>
<td>1957</td>
<td>251,454</td>
<td>1985</td>
<td>242,923</td>
</tr>
<tr>
<td>1935</td>
<td>26,638</td>
<td>1958</td>
<td>259,820</td>
<td>1986</td>
<td>285,728</td>
</tr>
<tr>
<td>1936</td>
<td>32,208</td>
<td>1959</td>
<td>278,911</td>
<td>1987</td>
<td>296,408</td>
</tr>
<tr>
<td>1937</td>
<td>40,819</td>
<td>1960</td>
<td>304,466</td>
<td>1988</td>
<td>319,141</td>
</tr>
<tr>
<td>1938</td>
<td>31,567</td>
<td>1967</td>
<td>503,753</td>
<td>1989</td>
<td>312,829</td>
</tr>
<tr>
<td>1939</td>
<td>34,819</td>
<td>1968</td>
<td>489,139</td>
<td>1990</td>
<td>296,042</td>
</tr>
<tr>
<td>1940</td>
<td>41,555</td>
<td>1969</td>
<td>631,527</td>
<td>1991</td>
<td>284,360</td>
</tr>
<tr>
<td>1941</td>
<td>51,054</td>
<td>1970</td>
<td>614,795</td>
<td>1992</td>
<td>279,852</td>
</tr>
<tr>
<td>1942</td>
<td>64,811</td>
<td>1971</td>
<td>593,377</td>
<td>1993</td>
<td>311,442</td>
</tr>
<tr>
<td>1943</td>
<td>18,345</td>
<td>1972</td>
<td>681,320</td>
<td>1994</td>
<td>357,500</td>
</tr>
<tr>
<td>1944</td>
<td>40,334</td>
<td>1973</td>
<td>814,042</td>
<td>1995</td>
<td>389,900</td>
</tr>
<tr>
<td>1945</td>
<td>75,257</td>
<td>1974</td>
<td>827,256</td>
<td>1996</td>
<td>354,100</td>
</tr>
<tr>
<td>1946</td>
<td>118,092</td>
<td>1975</td>
<td>697,660</td>
<td>1997</td>
<td>368,500</td>
</tr>
<tr>
<td>1948</td>
<td>159,284</td>
<td>TQ</td>
<td>218,038</td>
<td>1999</td>
<td>416,658</td>
</tr>
<tr>
<td>1949</td>
<td>150,899</td>
<td>1977</td>
<td>792,957</td>
<td>2000</td>
<td>420,299</td>
</tr>
<tr>
<td>1950</td>
<td>151,795</td>
<td>1978</td>
<td>846,313</td>
<td>2001</td>
<td>354,769</td>
</tr>
<tr>
<td>1951</td>
<td>198,383</td>
<td>1979</td>
<td>878,283</td>
<td>2002</td>
<td>372,800</td>
</tr>
<tr>
<td>1952</td>
<td>161,328</td>
<td>1980</td>
<td>682,624</td>
<td>2003</td>
<td>403,892</td>
</tr>
<tr>
<td>1953</td>
<td>180,047</td>
<td>1981</td>
<td>668,902</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1954</td>
<td>152,567</td>
<td>1982</td>
<td>616,784</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1955</td>
<td>164,316</td>
<td>1983</td>
<td>677,966</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sources:** For fiscal years 1933 to 1961, collection figures have been taken from the *Annual Report of the Secretary of the Treasury on the State of the Finances* for the fiscal year ended June 30, 1962.

For fiscal years 1962 to 1979, collection figures have been taken from the *Statistical Appendix to the Annual Report of the Secretary of the Treasury on the State of the Finances* for FY1979.

For fiscal years 1980 to 1987, collection figures have been derived from appropriate *Annual Reports of the Commissioner of Internal Revenue* published by the Department of the Treasury, Internal Revenue Service, Publication 55.
For fiscal years 1988 to 1992, collection figures have been derived from appropriate information releases entitled *Internal Revenue Report of Excise Taxes*.
