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## **THE DEVELOPMENT OF TAXATION IN THE BIBLE: IMPROVEMENTS IN COUNTING, MEASUREMENT, AND COMPUTATION IN THE ANCIENT MIDDLE EAST**

*Abstract:* This paper traces the development of five taxation types in the Bible — income taxes, property taxes, special assessment taxes, poll taxes (all direct taxes), and indirect taxes. The development of these taxes is discussed within the context of Israel's historical development. The impact of counting, measurement, and computation on the development of taxation is also considered.

Accounting historians have studied and narrated several accounting concepts mentioned in the Bible. Hagerman [1980, pp. 71-76] observed that many of today's accounting concepts were already in use during Biblical times. Davis [1981, pp. 71-72] subsequently detailed the first recorded audit in the Bible. In this paper, an effort is made to analyze the development of taxation in the Bible over the many centuries of ancient Israel's existence in light of improvements in counting, measurement, and computation in the Middle East.

The Bible contains numerous references to taxation. This paper examines and analyzes the various types and instances of taxes in the Bible in light of political and economic developments. Sources outside the Bible are also referenced, such as Flavius Josephus [Whiston, 1960], a Jewish historian of the 1st century of the present era, and Schmandt-Besserat [1988].

The term "tax" is characterized more by its involuntary nature than its precise terminology; precise tax terminologies did

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not exist in Biblical days. A tax is not a voluntary payment like a charitable contribution. The eminent jurist Learned Hand stated, "... taxes are enforced exactions, not voluntary contributions" [*Commr. v. Newman*, p. 851]. *Webster's New World Dictionary* [Guralnik, 1976, p. 1458] lists the following definitions of the noun "tax:" 1. a) a compulsory payment, usually a percentage, levied on income, property value, sales price, etc. for the support of a government; b) a special assessment, as in a society, labor union, etc.; 2. a heavy demand; burden; strain."

This distinction between taxes and contributions is clearly indicated in the Bible. Four types of direct taxes or involuntary payments (income taxes, property taxes, special assessment taxes, and poll or capitation taxes) to the governing authorities are mentioned. The Bible also references indirect taxes, such as custom duties or sales taxes. In contrast, contributions which provided for assembly of the tabernacle are discussed as nontax, free-will offerings.

This paper is not concerned with modern technical matters, such as the incidence of taxation on economic layers of society or the justiciability of a tax from the standpoint of horizontal or vertical equity. No discussion is made of exemptions or special stipulations since these do not appear in the Biblical record. For instance, the Bible refers to a 10% tithe, implicitly assuming that it applies to all owners of farmland and livestock.

In the theocracy of ancient Israel, tithing in a religious context was the same as taxation in a governmental context. It is impossible to distinguish religious and governmental taxation since religion and government were one and the same in ancient Israel. Hartman [1963, p. 2395] wrote, "In a strictly theocratic state there is no real distinction between the treasury of the sanctuary and the treasury of the government."

The various types of taxation mentioned in the Bible are discussed in the following section. Each of these five types is illustrated by Biblical passages. Subsequently, taxation is examined chronologically over six consecutive periods of Israel's history. The reader is referred to Appendix A, where types of taxes and chronological periods are cross-referenced.

Primary focus will be on Biblical accounts that illustrate the development of these five types of taxation in ancient Israel. The reason for discussion of sources apart from the Biblical record, such as Flavius Josephus and others, is to introduce the cultures surrounding ancient Israel in terms of their taxation methods, as well as their political and economic development.

the Middle East (Iraq, Egypt, and Israel) contribute to the cultural milieu.

### TAXATION TYPES

Income taxes, property taxes, special assessment taxes, and poll taxes are all mentioned in the Bible. Though tax terms, such as rate and base, are not technically discussed in the Bible, the tax attributes indicated by these terms are sufficiently implicit to distinguish these four types of direct taxation. Indirect taxes, such as custom duties or sales taxes, are also mentioned in the Bible.

*Income Tax:* An income tax is a levy based on the income of a person or the yield of property, such as farmland or herds of livestock. Genesis 47:26 mentions such a tax:<sup>1</sup>

So Joseph established it as law concerning land in Egypt — still in force today — that a fifth of the produce belongs to Pharaoh . . .

This was a 20% tax on the yield of property, a precursor to a government-imposed income tax. Other parties have also typified a levy based on property yield as an income tax. One author referred to this Egyptian practice as follows, “Agricultural production was taxed at a hefty 20%. This was . . . exactly like our income tax” [Adams, 1993, p. 3].

After the Hebrews left Egypt, the rate was dropped to 10%, the tithe rate [Leviticus 27:32]:

The entire tithe of the herd and flock — every tenth animal that passes under the shepherd’s rod — will be holy to the Lord.

However, the reduction was actually less since the Hebrews were commanded to present their “firstfruits” to the priests, as mentioned in Deuteronomy 18:3-5:

This is the share due the priests from the people who sacrifice a bull or a sheep: the shoulder, the jowls and the inner parts. You are to give them the firstfruits of your grain, new wine and oil, and the first wool from the shearing of your sheep, for the Lord your God has chosen them and their descendants out of all your tribes to stand and minister in the Lord’s name always.

<sup>1</sup>Unless otherwise stated, all Biblical references are from the *New International Version of The Holy Bible*. KJV denotes *The Holy Bible, King James Version*.  
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One observer classified these obligatory payments as taxes even though a percentage is not stated [Oden, 1984, p. 169]. For purposes of this paper, "firstfruits" are grouped with tithes as income taxes in that their amount would presumably have been a function of the total amount of agricultural production.

*Property Tax:* Valuation of personal or real property is the basis for an assessment of a property tax. II Kings 23:35 discusses the property tax:

Jehoiakim paid Pharaoh Neco the silver and gold he demanded. In order to do so, he taxed the land and exacted the silver and gold from the people of the land according to their assessments.

The phrase, "he taxed the land," should not be construed as a tax on the people. The tax object was the land, although the owners of the land were paying the tax. A literal word-for-word translation of the relevant Hebrew text is [II Kings 23:35]:

And the silver and gold gave Yehoiakim to Pharaoh. But he [Yehoiakim] taxed *the land* to give the money according to Pharaoh; each man according to his taxation he exacted the silver and the gold of the people of the land to give to Pharaoh Neco.

Note is made of the difference between the income tax and this property tax. The former was based on the increase or yield of property, whereas the latter was a function of the value of property. Since it was related to value, increase or yield was immaterial.

*Special Assessment Tax:* A special assessment tax is a tax levied to raise revenue for specific projects. II Chronicles 24:5 mentions a special assessment tax:

He called together the priests and Levites and said to them, 'Go to the towns of Judah and collect the money due annually from all Israel, to repair the temple of your God . . .'

The immediate purpose of this levy was to repair the temple that had been built by King Solomon in the United Monarchy (c. 1050-880 B.C.)<sup>2</sup> at vast expense. II Chronicles 24:6-9 indicates that Moses had levied a tax for maintenance of

<sup>2</sup>The dates used for identifying Israel's historical periods are from F.F.

the tabernacle centuries previously in the days of the Tribal Confederation (c. 1300-1050 B.C.). Since this tax was not described as a set uniform sum per person, it is not treated as a poll tax. This new levy took place during the Divided Kingdom (c. 880-540 B.C.), when the temple had fallen into disrepair. Hence, it could be said that this levy mentioned in II Chronicles 24:5 was a special assessment tax for infrastructure repair.

*Poll Tax:* This tax is a flat sum levied on a per-capita basis. A poll tax is mentioned in Exodus 30:12. A tax was levied on each person 20 years old and older at the time of the departure of the Israelites from Egypt:

Then the Lord said to Moses, 'When you take a census of the Israelites to count them, each one must pay the Lord a ransom for his life at the time he is counted.'

Much later, a one-third shekel poll tax was established for maintaining public worship in the temple (Nehemiah 10:32): "We assume the responsibility for carrying out the commands to give a third of a shekel, each year for the service of the house of our God."

In Matthew 17:24-27, a New Testament poll tax is found:

After Jesus and his disciples arrived in Capernaum, the collectors of the two-drachma tax came to Peter and asked,

'Doesn't your teacher pay the temple tax?'

'Yes, he does,' he replied.

When Peter came into the house, Jesus was the first to speak. 'What do you think, Simon?' he asked. 'From whom do the kings of the earth collect duty and taxes — from their own sons or from others?'

'From others,' Peter answered.

'Then the sons are exempt,' Jesus said to him. 'But so that we may not offend them, go to the lake and throw out your line. Take the first fish you catch; open its mouth and you will find a four-drachma coin. Take it and give it to them for my tax and yours.'

The poll tax was presumably the type of tax that the Romans levied when Caesar Augustus decreed a census or taxing of "the entire Roman world" in Luke 2:1-3 at the time of Jesus' birth:

In those days Caesar Augustus issued a decree that a census should be taken of the entire Roman world.

[This was the first census that took place while Quirinius was governor of Syria.] And everyone went to his own town to register.

This census tax is treated here as a poll tax for sake of consistency. The census tax that was commanded for the Israelites upon their departure from Egypt was a poll tax, fixed at a set sum of one-half shekel per person. Of course, it might have involved the registering of property as well as of persons. If so, it would have been a property tax as well as a poll tax.

*Indirect Taxes:* These indirect taxes were of various types, such as custom duties or sales taxes. An excise tax on articles consumed was called "belo" in Hebrew, and a road toll or customs tax was termed "halakh." In Ezra 4:20, these indirect taxes are termed "tribute" and "duty" respectively in the modern English version. Other words used in various places in the Old Testament were "mas" (forced labor) [I Kings 5:13; v. 27, Hebrew text], "massa" (burden) [II Chronicles 17:11], "mekhes" (measure) [Numbers 31:25-31], and "middah" (tribute) [Ezra 4:20]. These numerous terms were perhaps necessary because the Hebrew language had no general word corresponding to the English word "tax" [Orr, 1956, p. 2918].

Paul referred to the duty of paying indirect as well as direct taxes in Romans 13:6-7 during the time of New Testament Israel:

This is also why you pay taxes, for the authorities are God's servants, who give their full time to governing. Give everyone what you owe him. If you owe taxes, pay taxes; if revenue, then revenue; if respect, then respect; if honor, then honor.

Two commentators, Lietzmann and Kuhl, have interpreted "taxes" and "revenue" in this passage as a reference to direct taxes and indirect taxes [Harmon, 1954, Vol. IX, p. 604]. In the original Greek of the New Testament, the word "phoros" is used for "taxes" and "telos" for "revenue." Of the four duties of the citizen to his government mentioned in verse 7, "taxes" and "revenue" are the only ones denoting a transfer of assets. The comment by Lietzmann and Kuhl is plausible as a distinction between "taxes" and "revenue" in light of the definitions from a Greek dictionary [Strong, 1983, p. 76]:

'phoros:' a tax, properly an individual assessment on persons or property; whereas 'telos' is usually a general

The first four types of taxes discussed in this paper are direct taxes, such as the "individual assessment on persons or property," referred to as "phoros" above. The indirect taxes, indicated by the term "telos," such as general tolls on goods or travel, were referred to by Jesus in Matthew 17:25: "From whom do the kings of the earth collect duty and taxes?" The term "duty" refers to indirect taxes and is a translation of a declined form of "telos" in the Greek text.

### STAGES OF TAXATION

The above types of taxation can best be understood and appreciated when viewed in the context of Israel's historical development. This history can be divided into the following six general periods: Israel's Infancy in Egypt; the Tribal Confederation; the United Monarchy of Saul, David, and Solomon; the Divided Kingdom; the Period after the Babylonian Captivity; and New Testament Israel (see Appendix A). These periods are discussed below within the context of the five taxation types identified above.

*Israel's Infancy in Egypt (c. 1700-1300 B.C.):* The 20% income tax of Genesis 47:26, applied to the yield of property, was levied on the Egyptians, ironically by Joseph, the Israelite prime minister appointed by Pharaoh during the seven years of plenty. During this time, the government ran surpluses so huge that they could not be measured [Genesis 41:49] as preparation for the seven famine years subsequently. It was these years of famine that brought the rest of the Israelites to Egypt from Palestine. The nation of Israel descended from the 70 members of Joseph's family protected in Egypt during this famine [Genesis 46:26, 27].

The breakdown of the means by which the surpluses could be measured evokes the deficiencies of the token system in dealing with large quantities. This brings up the primitive evolutionary development of accounting as described by Schmandt-Besserat [1986, pp. 32-39]. A system of clay counters or tokens represented "the first unequivocal evidence of accounting in the prehistoric Middle East." The use of tokens required a one-for-one correspondence with the items counted. For instance, one clay ball used as a token could represent one measure of grain, two clay balls could represent two measures of grain, etc.

The token system eventually developed into symbols



on clay tablets representing abstract quantities. Schmandt-Besserat [1988, p. 7] described the methodology:

The first state emerged in Sumer, present-day Iraq, about 3100 B.C. The new political system required citizens to deliver in-kind contributions to the temple, where the goods were stored and redistributed. The increased volume of accounting involved in registering the entries and expenditures of temple warehouses brought about the collapse of the archaic token system and its replacement by writing. At the same time, the clay tablets show the first evidence for abstract counting.

Conceivably, the huge surpluses in Egypt under Joseph could not be measured for some of the same reasons suggested by Schmandt-Besserat in connection with ancient Iraq. Both locales are of course in the Middle East, and there is a rough correspondence chronologically. The parallel between Egypt and Iraq is their shared lack of a ready computational means. Of course, there are differences. The token system disappeared over a thousand years before Israel's captivity in Egypt. The Egyptian system was based on a developed system of writing and abstract counting, whereas the token system was more appropriate to the needs of an illiterate society.

Some kind of rudimentary tallying system was supposedly used by the Egyptians to accumulate totals. Calinger [1995, p. 8] observed, "Homo sapiens sapiens (thinking humans) . . . used tallying techniques widely." The Old Kingdom Egyptians had even developed a positional or place-value notation system for computational purposes that was similar to that of the Old Babylonian Dynasty, but was soon lost. Egyptian mathematics thus appears mainly to have been limited to recording amounts and distances accumulated by tallies. Manipulation of those amounts was [Calinger, 1995, p. 29]:

essentially additive, meaning that they reduced multiplication and division as children and electronic computers do, to repeated additions and subtractions.

Calinger [1995, p. 29] described a mathematical problem in the Rhind Papyrus,<sup>3</sup> "The problem was solved by trial and error — as it has been suggested, the Egyptians solved all their

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<sup>3</sup>One of the oldest mathematical documents in recorded history, dating from around the Twelfth Dynasty (2000-1788 B.C.), was discovered in 1858 in Egypt and is now in the British Museum.

mathematical problems." Though the measurement system had advanced to this tally stage from the token system of a one-for-one correspondence, following the developments in ancient Iraq, the lack of a ready computational means apparently caused the surpluses to overrun the means of tracking them.

An implicit development by Israel during the United Monarchy, centuries after the nation's Infancy in Egypt, is very telling. An approximation of the mathematical "pi" (3.1416) as 3.0 is found in I Kings 7:23 [quoted in Calinger, 1995, p. 35]:

He made the Sea (a furnishing of the temple) of cast metal, circular in shape, measuring ten cubits from rim to rim and five cubits high. It took a line of thirty cubits to measure around it.

There is no indication that any such development by Israel occurred before this time, or even any indication that "pi" was used later in Israel for measurement of volume. The absence of this mathematical fundamental for ascertaining the volume of circular storage pots, bins, vats, or heaps of farm produce would make it completely understandable that the surpluses were unmeasurable from the standpoint of volume computations based on dimensions. Supposedly, volume computations based on weight would have been a help, but the greater the surpluses, the harder it would have been to estimate volume by weighing the produce. Thus, "pi"-based volume computations, based on dimensions, would have been all the more indispensable had the concept existed.

The observation of Schmandt-Besserat [1988, p. 7] about Sumer's token system suggested a connection between taxation and economic development. As Sumer emerged, its new political system required increased taxes in the form of in-kind contributions. The method of accounting for mounting stocks of grains and produce had to be improved from the clay-token system of a one-to-one correspondence to abstract symbols recorded in writing. As the state began to be able to support the needs of the needy as well as the ambitions of a trader class, the door opened wider to commerce and a resulting division of labor which promoted economic development.

The development of a writing system in which abstract quantities were represented by symbols undoubtedly contributed to advances in taxation. A tax of 20% of a hundred measures of grain is infinitely easier to levy and record in symbols, such as "20% x 100," on a papyrus than to subgroup 20 of 100 clay balls in rows on the ground in a token system. The asses-

sors might have even written numerals equivalent to "1 in 5," thus indicating an even simpler tax structure. Hence, the increased emphasis on taxation could be described as arising from two factors — 1) the needs of the state for sponsoring more of the infrastructure demands of society, and 2) the improvements of the tax system as the use of clay tokens gave way to abstract symbols recorded in writing. It does not seem that taxation caused economic development as much as better taxation allowed more economic development. Economic development became more possible as the use of abstract symbols in writing brought about more efficient and reliable methods of taxation.

In summary, Israel's Infancy in Egypt was accompanied by the first recorded tax in the Bible, described as an income tax of 20% levied under Pharaoh's authority by Joseph. This tax was imposed to accumulate food stocks for a predicted famine that became so huge as to be beyond measure. The development of counting from the token system to abstract symbols capable of representing large quantities, described by Schmandt-Besserat [1988] in connection with ancient Iraq, has been examined for any possible light. This theory of Schmandt-Besserat, perhaps aptly termed a "token/abstract symbol" theory, also suggests an intriguing connection between taxation and economic development since the use of symbols for recording quantities provides a means of levying and collecting taxes more conducive for an advanced economy than the token system. It even suggests that the additional efficiencies of a change to a numerical system "paid" for a drop in the rate from 20% to 10%.

*The Tribal Confederation (c. 1300-1050 B.C.):* After remaining in Egypt for approximately 400 years, the Israelites left Egypt in the Exodus and made the long transition from a tribe into a nation. At this time a tithe of 10% on gross income was levied as a tax on the produce of the land and herds [Leviticus 27:32], only half of the earlier 20% tax in Egypt. Deuteronomy 26:10-11 describes it as a support for the priesthood:

... I bring the firstfruits of the soil that you, O Lord, have given me. Place the basket before the Lord your God and bow down before Him. And you and the Levites and the aliens among you shall rejoice in all the good things the Lord your God has given to you and your household.

tribal confederation, the building of the tabernacle, entirely from free-will offerings:

From what you have, take an offering for the Lord. Everyone who is willing is to bring to the Lord an offering of gold, silver and bronze: blue, purple and scarlet yarn and fine linen; goat hair; ram skins dyed red and hides of sea cows; acacia wood; olive oil for the light; spices for the anointing oil and for the fragrant incense; and onyx stones and other gems to be mounted on ephod and breastpiece.

All who are skilled among you are to come and make everything the Lord has commanded: the tabernacle with its tent and its covering, clasps, frames, crossbars, posts and bases.

In addition, during this era of Israel's history, the poor were allowed to glean around the corners of the fields of the landowners [Leviticus 19:9-10]:

When you reap the harvest of your land, do not reap to the very edges of your field or gather the gleanings of your harvest. Do not go over your vineyard a second time or pick up the grapes that have fallen. Leave them for the poor and the alien. I am the Lord your God.

There was no need for heavy taxation. The tithe supported the tabernacle worship and priests and was not expended for social welfare purposes. As the poor were left to glean for themselves, the need of taxation was decreased.

During this time period, the written numerical system was primitive compared to today. The Bible's Hebrew language used letters to represent quantities. The Hebrew letter for "A" represented the quantity one. The Hebrew letter for "B" represented two, etc. No effort was evidently made to group the letters by powers or orders to connote large quantities. Rather, larger amounts were expressed as words. For instance, in the Hebrew text of Numbers 1:46 in the Bible, the 603,550 Israelites that left Egypt in the Exodus are recorded, spelled out in words of Hebrew letters as "six hundred thousand and three thousand and five hundred and fifty," rather than written in numerals. Computation using these non-ciphered written amounts was probably cumbersome, if possible at all. Later translations expressed the amount in numerals.

The most ancient Hebrew letters are scarcely recognizable today, even to the native-born Israeli. Even in the very earliest forms of the Hebrew Bible, letters were used to represent

amounts. There is no evidence that the development of writing and abstract counting in Hebrew culture predated such developments in neighboring cultures in the Mediterranean Basin. As far as the evidence allows, it may be surmised that writing developed in Hebrew culture at least as early as the date of Israel's exodus from Egypt, 1300 B.C., at a time when the first five books of the Bible are traditionally thought to have been committed to a written record. The use of numerals to symbolize abstract counting certainly took place centuries later, no earlier than similar developments in the neighboring cultures.

The implications are far-reaching for assessing and collecting the income and poll taxes which until this stage of Israel's existence had been undertaken without abstract numerals and means of computation. It is unfathomable how the administration of any tax system would have been possible under such conditions.

A poll tax of one-half shekel per person was also instituted during this time. This tax of Exodus 30:12 was previously discussed. It may have been the first tax of ancient Israel for it is also described as a "crossing over" levy in Exodus 30:14. Israel was scarcely a nation before it crossed over the Red Sea.

*The United Monarchy of Saul, David, and Solomon (c. 1050-880 B.C.):* With Saul, the first king of Israel, there appeared a new emphasis on taxation in the full sense of enforced exactions. The prophet Samuel warned of this development [I Samuel 8:11, 15, 17]:

He said, 'this is what the king who will reign over you will do . . .

He will take a tenth of your grain and of your vintage and give it to his officials and attendants.

He will take a tenth of your flocks.'

Building the temple required huge capital expenditures from concomitant tax revenues. The men of Israel were pressed into service as loggers in Lebanon cutting down timber [I Kings 5:13-14]:

King Solomon conscripted laborers from all Israel — thirty thousand men. He sent them off to Lebanon in shifts of ten thousand a month, so that they spent one month in Lebanon and two months at home.

As ruler of a vast kingdom, King Solomon's court was supported by his subjects [I Kings 4:22-24, 27]:

Solomon's daily provisions were thirty cors<sup>4</sup> of fine flour and sixty cors of meal, ten head of stall-fed cattle, twenty of pasture-fed cattle and a hundred sheep and goats, as well as deer, gazelles, roebucks and choice fowl. For he ruled over all the kingdoms west of the River, from Tiphseh to Gaza, and had peace on all sides.

The district officers, each in his month, supplied provisions for King Solomon and all who came to the king's table . . .

*The Divided Kingdom (c. 880-540 B.C.):* Taxation of crops, herd yields, and other types of income was so heavy under King Solomon's son, King Rehoboam, that Israel split into two kingdoms, the northern kingdom (Israel) and the southern kingdom (Judah) [II Chronicles 10:10, 13-14, 18-19]:

'Your father put a heavy yoke on us, but make our yoke lighter . . .'

The king answered them harshly. Rejecting the advice of the elders, he followed the advice of the young men and said, 'My father made your yoke heavy; I will make it even heavier.'

King Rehoboam sent out Adoniram, who was in charge of forced labor, but the Israelites stoned him to death. King Rehoboam, however, managed to get into his chariot and escape to Jerusalem. So Israel has been in rebellion against the House of David . . .

The tithe continued to be levied in Judah as well as in Israel:

As soon as the order went out, the Israelites generously gave the firstfruits of their grain, new wine, oil and honey and all that the fields produced. They brought a great amount, a tithe of everything [II Chronicles 31:5].

. . . Bring your sacrifices every morning, your tithes every three years [Amos 4:4].

A property tax was levied by King Jehoikim to raise tribute money for the Pharaoh of Egypt. He "taxed the land" [II Kings 23:35]. In addition, a special assessments tax was levied in Judah by King Joash for repair of the temple [II Chronicles 24:5]: "Go to the towns of Judah and collect the money due annually from all Israel, to repair the temple of your God."

<sup>4</sup>About 6 1/4 bushels. See entry "weights and measures" in Tenney [1967].

In this period, the northern kingdom of Israel disappeared into Assyrian captivity, and somewhat later the southern kingdom of Judah was taken into Babylonian captivity.

*The Period after the Babylonian Captivity (c. 540-100 B.C.):* The people of Judah returned from Babylon after several decades. The primary development in this era was the specific exemption of the priests and other religious workers from taxes [Ezra 7:24]:

. . . you have no authority to impose taxes, tribute or duty on any of the priests, Levites, singers, gatekeepers, temple servants or other workers at this house of God.

They were the ones to whom the tithes were brought in earlier Israel, so their tax exemption was already implicit. In view of the importance of religion as a focus of nationhood to the returned people of Judah, it was probably very significant that the Persian King, Artaxerxes, issued the proclamation recorded in the above quotation.

The tax system was reformed as well, for the heavy exactions under King Solomon were partially replaced by contributions and firstfruits [Nehemiah 12:44] that were closer to the Biblical model for giving and less resembled forced exactions. But the tithe as a tax was still assessed, a "portion required by the Law," as a full reading of the verse reveals. Presumably the rate of tax was the traditional 10%.

A new poll tax emerged in this period. It was a required annual payment of one-third shekel by each person to maintain temple worship [Nehemiah 10:32].

*New Testament Israel:* The poll tax, the tax paid by Jesus and Peter, was a principal tax in New Testament Israel comprised primarily of the descendants of Judah (1-70 A.D.). The tithe as a 10% levy on the increase of produce and herds is not mentioned in the New Testament. Its only serious mention as a revenue source to the temple or government is as a property tax based on a 10% portion of total holdings [Luke 18:12 KJV]: "I fast twice a week and give a tenth of all I possess."

Josephus described a poll tax that the Romans assessed in Egypt. He addressed the Jews of Israel in the 1st century of the present era [Whiston, 1960, p. 489]:

What occasion is there for showing you the power of the Romans over remote countries, when it is easy to learn it from Egypt, in your neighborhood? This coun-

try is extended as far as the Ethiopians, and Arabia the Happy, and borders upon India; it has seven million five hundred thousand men, besides the inhabitants of Alexandria, as may be learned from the revenue of the poll tax. . . it pays more tribute to the Romans in one month than you do in a year.

Josephus also referred to the two-drachma poll tax, discussed by Jesus and Peter above at Matthew 17:24-27. Josephus [Whiston, 1960, p. 597] described how this two-drachma tax that each Jew had to pay to the temple in Jerusalem yearly until the time of its destruction in 70 A.D. was redirected by Caesar Titus in later years to the Roman government.

Gibbon [1903, p. 24] shed light on the particular details of the poll or capitation tax that the Romans levied on the Jews:

It is somewhat remarkable that the flames of war consumed almost at the same time the temple of Jerusalem and the Capitol of Rome; and it appears no less singular that the tribute which devotion had destined to the former should have been converted by the power of an assaulting victor to restore and adorn the splendor of the latter. The emperors [of Rome] levied a general capitation tax on the Jewish people; and, although the sum assessed on the head of each individual was inconsiderable, the use for which it was designed, and the severity with which it was exacted, were considered as an intolerable grievance.

It is noteworthy that of the four New Testament Gospel writers, Matthew, as a former tax collector and probable numeracy expert, was the only one who used a technical term for taxes, "didrachma," "two drachmas," in referring to the subject of taxes. This was equivalent to the half-shekel poll tax that was levied on each Israelite leaving Egypt at the time of the Exodus [Hartman, 1963, p. 2401]. The other three used general terms in their references to taxes, "kensos" (poll taxes) and "phoros" (generally, taxes).

The other principal tax in New Testament Israel was the indirect taxes included within the meaning of the term "telos." Sometimes these indirect taxes are denoted by the term "customs" or "duties" in modern English versions of the Bible. The ruling authorities in the Israel of this epoch certainly did levy such taxes, although the New Testament does not go beyond use of the term "telos" in description or discussion. Josephus reported that Herod the Great laid a tax on produce of the field, and that his son and successor Archelaus levied a sales tax on



all items bought and sold [Buttrick, 1962, Vol. R-Z, p. 520; Whiston, 1960, pp. 330, 367].

The New Testament period of ancient Israel is exciting in that the primary methods of taxation had evolved somewhat from the Old Testament's income taxes, property taxes, and special assessment taxes to a poll tax and indirect taxes, such as customs duties. The fact that the Romans, through agents such as Herod the Great, levied some of those older taxes, such as the tax on land, does not diminish the significance of this shift.

### SUMMARY

The five forms of taxation referred to in the Bible (income taxes, property taxes, special assessment taxes, poll taxes, and indirect taxes) developed over the 17 or 18 centuries that passed between Israel's Infancy in Egypt to Israel in New Testament times in the first decades of the present era. These types of taxation started with a 20% tax in Egypt based on yields of crops and herds. This tax was instituted by Joseph, the Israelite prime minister of Egypt.

However, after the exodus of the Israelites from Egypt, the rate of the income tax was halved to 10% in the form of a tithe. A poll tax as a one-time census charge also emerged in the time of the Tribal Confederation. By the time of the United Monarchy, special assessment taxes, as well as indirect taxes, were levied. So heavy was the burden of taxation that the United Monarchy split. By the start of the present era, poll taxes and indirect taxes had become the primary taxes in Israel referred to in the Bible. These developments in taxation were aided by improvements in counting, measurement, and computing, as the use of written abstract symbols supplanted the token system of a one-for-one correspondence.

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## APPENDIX A

## Some Tax References in the Bible Referred to in the Paper

	Direct Taxes			Indirect Taxes
	Income Taxes	Property Taxes	Special Assessment Taxes	
Six general periods of Israel's Biblical existence				
1. Israel's Infancy in Egypt (1700-1300 B.C.)	Gen. 47:26			
2. Tribal Confederation (1300-1050 B.C.)	Lev. 27:32			Exodus 30:12
3. United Monarchy of Saul, David, and Solomon (1050-880 B.C.)	I Sam. 8:11, 15, 17		I Kings 4:22-24, 27	Ezra 4:20
4. Divided Kingdom (880-540 B.C.)	II Chron. 31:5 Amos 4:4	II Kings 23:35	II Chron. 24:5	
5. Period after the Babylonian Captivity (540-100 B.C.)	Nehemiah 12:44			Nehemiah 10:32
6. New Testament Israel (1-70 A.D.)		Luke 18:12		Matt. 17:25 Luke 2:1-3