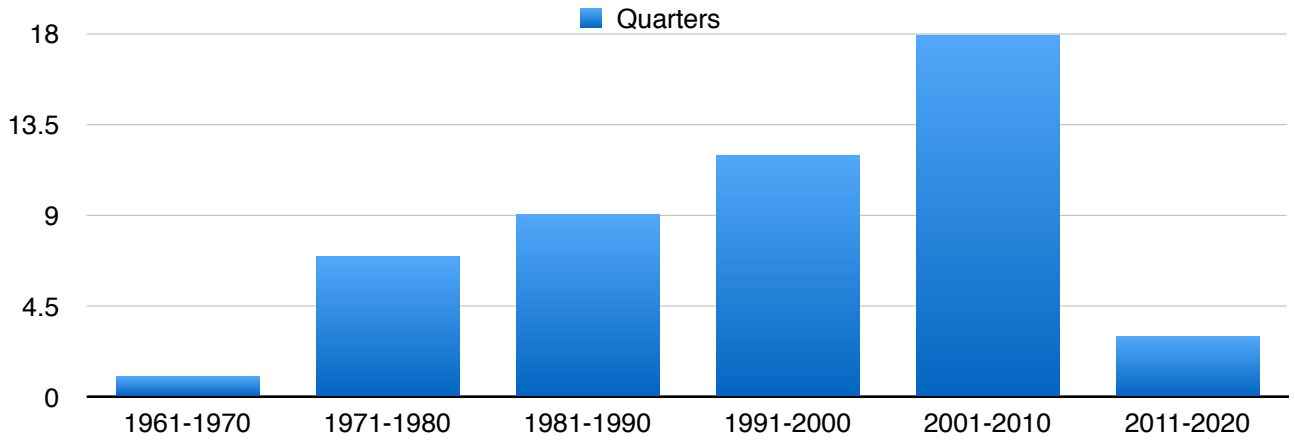
Annie Thrasher

Quarters: I collected these from my own change jar and from my suite mates, since we all save our change for laundry. I don't really think that this introduced any bias in my collection, because I didn't get them all from the same place, whereas if I had gotten them from a bank there may have been a likelier chance of me getting a lot of newer coins. Since we all had been collecting the coins from various stores and our parents' change jars, I think there was a better chance of there being a diverse range of coins. The population is all of the coins in the collection. Individuals are the quarters or the pennies. The variables of the quarters are whether or not they have eagles on the back, and both quarters and pennies have the year minted as a variable. The quarters' mint year is a quantitative variable, and the eagle is a categorical.



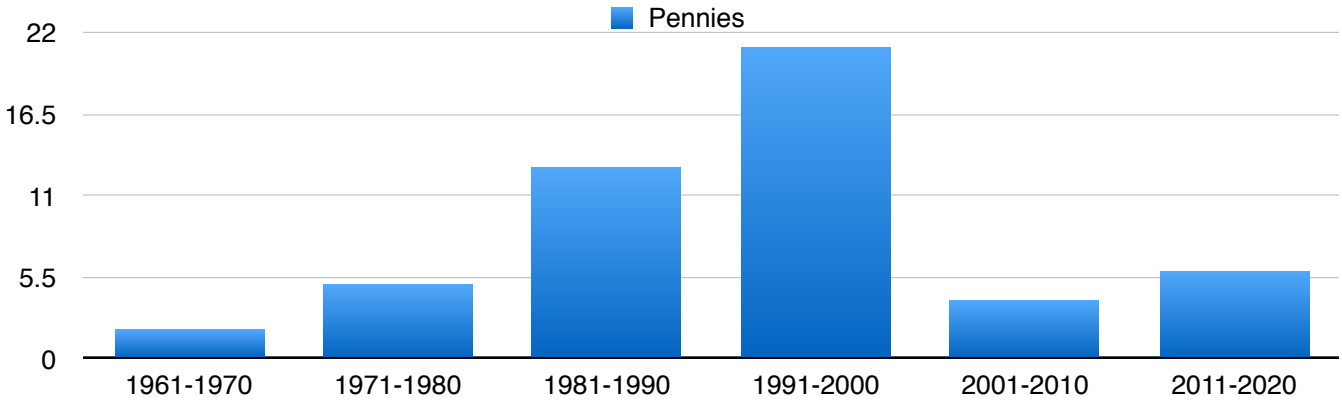
Quarters	Quarters
Min	1969
Q1	1982
Median	1999.5
Q3	2006
Max	2014
Mean	1995.14
Standard Dev.	12.3

The center of the spread is in the 1990s. It makes sense that there are more of the newer coins, because older coins get taken out of circulation as they age. Past 2010 are outliers, probably because there are not nearly as many of these in circulation as there are of the 1980-2000. The shape is representative of the fact that there are more newer coins than old, and shows the evident drop in amounts of newest coins. I think that the median in the graph and table are very similar and make a lot of sense. I think that my data is slightly skewed towards older coins, and that in reality there are more new coins in circulation.

Quarters	
95% Confidence Interval	(1991.7,1998.5)
Margin of Error	3.409

Annie Thrasher

Pennies: I collected these from my own change jar and from my suite mates, since we all save our change for laundry. I don't really think that this introduced any bias in my collection, because I didn't get them all from the same place, whereas if I had gotten them from a bank there may have been a likelier chance of me getting a lot of newer coins. Since we all had been collecting the coins from various stores and our parents' change jars, I think there was a better chance of there being a diverse range of coins. The population is all of the coins in the collection. Individuals are the quarters or the pennies. The variables of the pennies are the years minted. Pennies have only a quantitative variable in their years.



Pennies	
Min	1961
Q1	1983
Median	1992.5
Q3	2000
Max	2014
Mean	1992.36
Standard Dev.	12.7

Since there are so many more pennies in circulation than quarters, it's a little harder to tell if the sample is representative. I still think that it is, though, because they still follow the pattern of there being less in the "extreme" years, and more in the center. The center is in the same place as the quarters, which leads me to the belief that it is probably true that most coins in circulation have a mean close to the year 1992. Once again, the mean falls in the same place in both the graphical and tabular forms. The outliers for the pennies are the oldest coins.

Pennies	
95% Confidence Interval	(1989,1995.8)
Margin of Error	3.52