THE PRICE ELASTICITY OF DEMAND IS MOST ELASTIC (LARGER CHANGE IN QUANTITY FOR A 1 PERCENT CHANGE IN PRICE) FOR COMPANION ANIMAL PRACTITIONERS AND LEAST ELASTIC FOR VETERINARIANS IN INDUSTRY. FOR COMPANION ANIMAL PRACTITIONERS, A SMALL REDUCTION IN SALARY WILL INDUCE A LARGER DEMAND FOR NEW VETERINARIANS.

DEMAND FOR NEW VETERINARIANS, 2013-2014

In 2013-14, 4,279 veterinarians passed the North American Veterinary Licensing Exam (NAVLE) and became eligible to enter the U.S. veterinary workforce. However, only an estimated 3,572 of these were U.S. students at U.S. accredited and non-U.S. accredited domestic and foreign veterinary colleges. In our survey of seniors at U.S. veterinary colleges (2,812), 2,608 of these seniors responded to the survey, with 1,140 (43.7 percent) indicating that they had accepted a position in either public or private practice, 696 (26.7 percent) indicating they had accepted an internship, and 59 (2.3 percent) a residency. In addition, 40 (1.5 percent) had extended their education, while 420 (16.1 percent) had not made a choice or received an offer at the time of the survey. The remainder represents those who did not respond to the question (9.7 percent).

The demand for new veterinarians can be estimated for each of the horizontally related markets. The estimated demand curve for six practice types is presented below. These individual demand curves can then be horizontally summed to produce the aggregate demand curve for new veterinarians.

Price elasticity of demand is the percentage change in price (compensation) required to trigger a one percent change in the quantity and indicates how employers will respond financially to a higher quantity of new veterinarians. They will be willing to take on more veterinarians but only for a reduced level of compensation. Price elasticity of demand differs significantly between the different practice types.

The price elasticity of demand is most elastic (larger change in quantity for a 1 percent change in price) for companion animal practitioners and least elastic for veterinarians in industry. For companion animal practitioners, a small reduction in salary will induce a larger demand for new veterinarians. In contrast, a very large reduction in salary would be needed to induce industry employers to increase the demand for new veterinarians.

EQUILIBRIUM
771 NEW VETERINARIANS
MEAN STARTING SALARY
$72,536.35

CURRENT
1,121 NEW VETERINARIANS
MEAN STARTING SALARY
$66,897.00

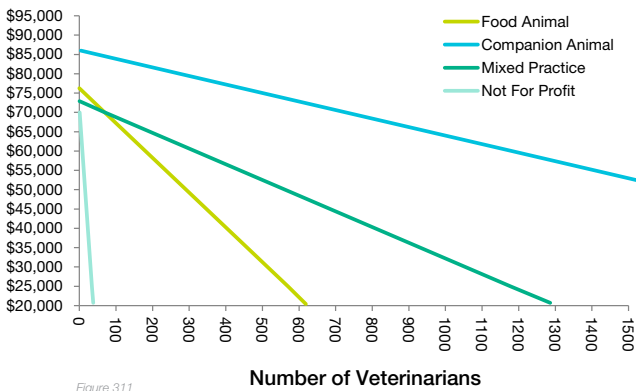## DEMAND FOR NEW VETERINARIANS
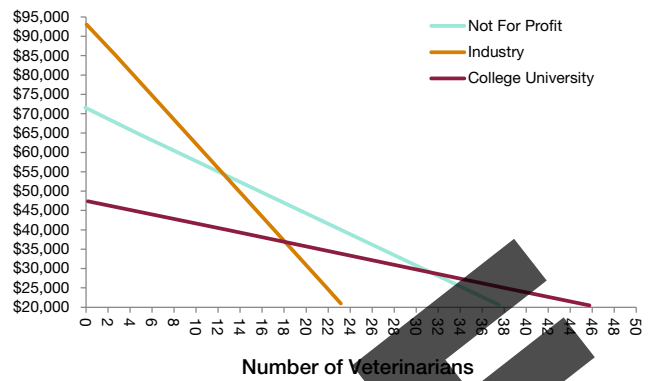

Figure 311

DEMAND FOR NEW VETERINARIANS

Figure 312

The equilibrium in the market for new veterinarians can be determined by equating the demand for new veterinarians with the supply of new veterinarians. The equilibrium number of new veterinarians is estimated to be 771 at a starting salary of $72,536.35, considerably different from the current market condition of 1,121 new veterinarians at a mean starting salary of $66,897.00.

NEW VETERINARIAN MARKET, SCENARIO:RETURN TO TREND

$y = 4E\text{-}06x^3 - 0.0168x^2 + 27.448x + 59282$

($74,594, 1011)

($72,536, 771)

$y = -16.13x + 89476$

$y = -16.13x + 83549$

Demand at Current GDP

Demand at Trend GDP
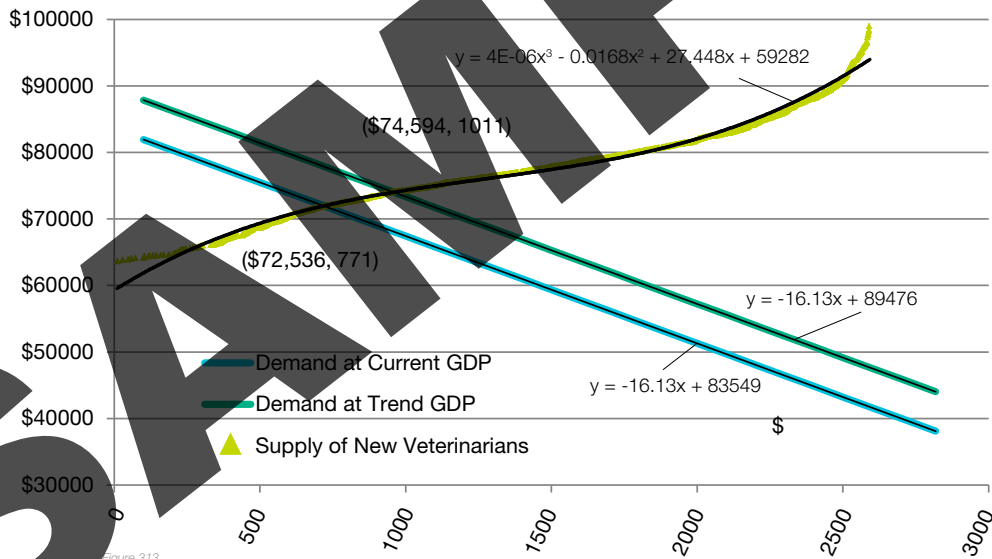
▲ Supply of New Veterinarians

Figure 313

With a recovery of real GDP per capita to trend levels, the equilibrium in the market for new veterinarians would be 1011 employed new veterinarians at a starting salary of $74,594.32.

From the data and analysis we can construct a picture of the market for new veterinarians as indicated below. In 2014 there were 1,121 respondents to the survey that indicated they had a position in hand and a mean starting salary of $66,897. This starting salary represents the salary that employers were willing to pay to clear the market of new veterinarians seeking employment. However, based on debt servicing obligations and living costs the last veterinarian supplied to the market required $78,469.50 in starting salary, a gap of $11,571.50. This level of mean starting salary would have reduced the debt to income ratio from the current 2.1:1 to 1.62:1.