

Production versus years of experience

Part III: When is a goaltender no longer a backup?

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Following an investigation of the production of forwards (Part I) and defensemen (Part II), the last major category would be the goaltenders. In this article, we will explore the production of goaltenders versus the number of seasons in the NHL. To determine a fair statistic for comparison of goaltenders, we will look at the save percentage. The higher the save percentage is, the more we define that the goaltender has talent. Since hockey is a team game, the goaltenders in a losing team can be overshadowed by their poor win results. The save percentage tells more of the actual performance of a goalie than the win-loss reports.

Correction factor

If the offensive statistics of the NHL vary per season, the goaltenders statistics must also have a non negligible variation. For the goaltenders, the save percentage of every goaltender in a regular season as been calculated and is presented in Figure 4. To obtain this correction factor, we looked at the number of shots occurred in a season and at the number of goals scored in that season. It can be seen that there exist a correlation of Figure 4 with Figure 1.

Results

For the goaltenders, we choose all the goalies that played more than 10 games during the 2005-06 regular season. Again, the save percentage variation per season, Figure 4, is taken in account during this calculation. Figure 5 presents the results.

Figure 4: Save percentage per season, from 1990 to 2007

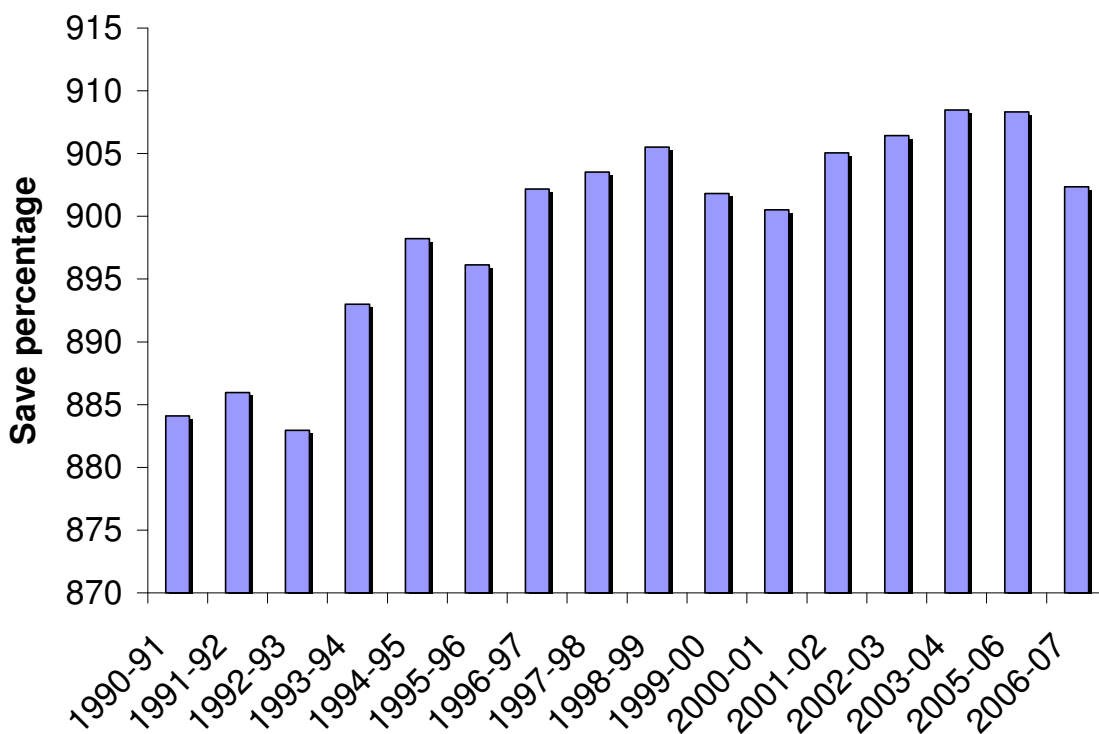
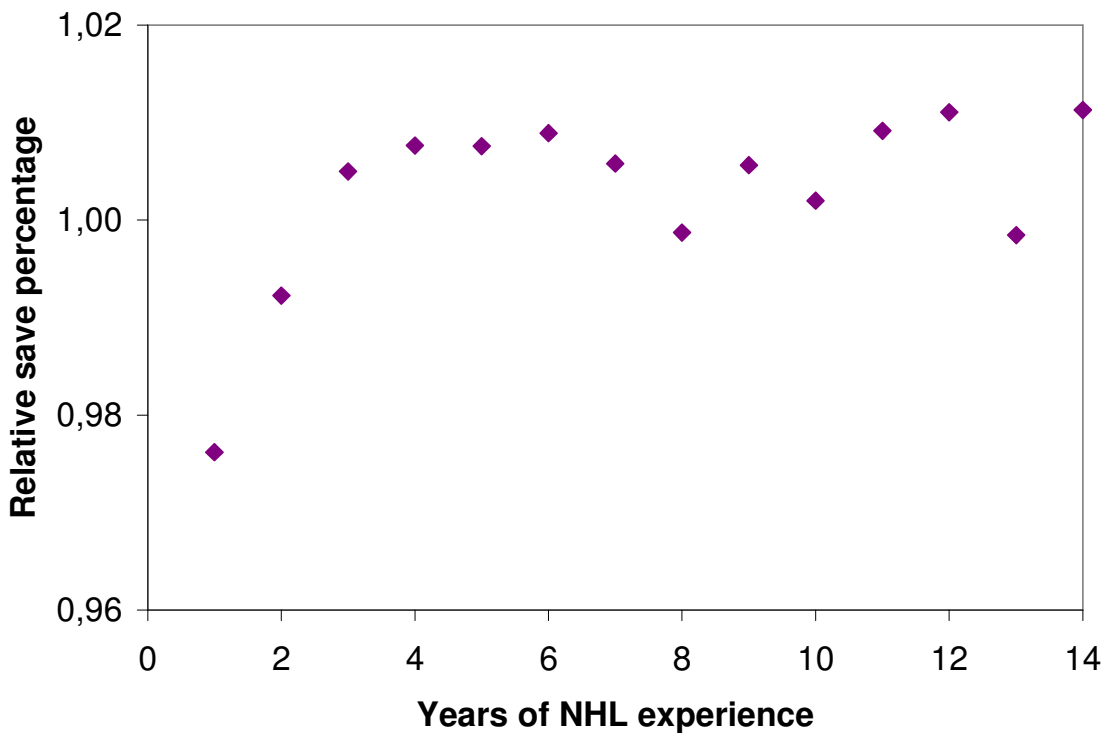


Figure 5: Relative goaltender save percentage per years of NHL experience



A significant adjustment to the game is notice for goaltenders in this plot. It takes a goaltender about 4 years of experience to fully gain confidence and produce big numbers. The first few years of a goaltender are usually the years that see the goaltender as being a backup and hence plays about 10 to 20 games per season. What makes a huge difference in terms of statistics is that young goaltenders that plays 15 games in a season tend to have a couple of really bad outings.

We also notice a dip around the 8th year of experience. The numbers proved that several goalies tend to have a bad year at least once in a career. This dip would correspond to an age of about 31 years (if we approximate the rookie age of a goaltender to be around 23). At the age of 31, the best goaltenders stay sharp and the others could either become a backup goaltender again or change leagues. A good recent example is Jose Theodore of the Colorado Avalanches that, after a tremendous numbers with the Montreal Canadiens, got several bad seasons. It can also be mentioned that from year 4 to year 14 that there is only a 0.01 fluctuation in the graph, so the numbers are relatively close to each other, hence a straight line.

Quick conclusion

A trend for the prime of skaters has been previously found, and a prime also exists for goaltenders. Goaltenders, just like forwards, take about 4 years of experience before getting serious numbers. After that time, the goalie should be considered to be a regular player.