2010-11 DIGR Ratings

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One the next page is the Defense Independent Goalie Ratings (DIGR) for the 2010-11 NHL Regular Season. This methodology gives an adjusted save percentage accounting for the quality and distribution of shots faced. To achieve the DIGR we build a model of each goalies performance during the season and then map every shot taken by the entire league to the individual goalie map. Details on this can be found at the following link: <u>DIGR paper</u>. The DIGR allows for a direct comparison of goalie performance since it is based upon the exact same shots not just the shots that an individual goalie faced.

The table on the next page contains the DIGR for 49 goalies with at least 600 shots faced. For this analysis we eliminate empty net goals, penalty shots and shootout shots. Along with the DIGR, we include the save percentage (RawSV%), the number of shots faced in our database (Shots), how the league average goalie would have fared (AvgGoalie) and the salary in millions of \$\$ for each of these 49 goalies. The league average save percentage in our database is 0.9133.

We ranked the goalies by DIGR and Tim Thomas is the top goalie, followed by Cory Schneider and Roberto Luongo. While it is not a surprise that Tim Thomas is at the top given his phenomenal year, the difference between Thomas and the second best goalie shrink by about 0.5% after we account for the difficulty of the shots he faced. Thomas had a great year but was help by a strong defense. Using AvgGoalie as a measure of average shot difficulty, Thomas had the 8<sup>th</sup> easiest shots faced among our 49 goalies. Jonathon Quick had the easiest shots and Cory Schneider faced the hardest set of shots (though Schneider barely appears in our list since he only faced 669 shots). Among those with over 1000 shots faced, Halak had to face the most difficult set of shots, on average.

Some other notables from this analysis. Jonas Hiller produced the biggest difference between DIGR and what an average goalie would do. For those facing over 1000 shots, no one comes close to his performance. Hiller and Bryzgalov are the only two goalies to appear in the top 10 of the DIGR for both the 2009-10 and 2010-11 seasons. Among those with high salaries, Backstrom, Brodeur, Giguere and Kiprusoff performed particularly poorly.

Other statistical analyses of NHL data that we have done can be found at: Statistical Analyses

2010-11 Regular Season DIGR © Michael Schuckers 2011

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Rank	Name	DIGR	RawSV%	Shots	AvgGoalie	Salary10-11
1	TimThomas	0.9312	0.9386	1808	0.9184	6.0000
2	CorySchneider	0.9285	0.9253	669	0.9009	0.9000
3	RobertoLuongo	0.9269	0.9275	1752	0.9104	10.0000
4	JonasHiller	0.9269	0.9249	1452	0.9067	4.5000
5	IlyaBryzgalov	0.9234	0.9211	2103	0.9121	4.5000
6	CamWard	0.9232	0.9221	2336	0.9123	5.0000
7	Marc-AndreFleury	0.9227	0.9189	1738	0.9134	6.0000
8	DevanDubnyk	0.9224	0.9164	1101	0.9067	0.8000
9	CoreyCrawford	0.9219	0.9200	1538	0.9109	0.8500
10	CareyPrice	0.9218	0.9220	2142	0.9132	2.5000
11	BrentJohnson	0.9214	0.9236	602	0.9144	0.6000
12	PekkaRinne	0.9204	0.9293	1881	0.9160	2.8000
13	HenrikLundqvist	0.9180	0.9204	1961	0.9159	7.7500
14	JaroslavHalak	0.9178	0.9117	1483	0.9055	2.7500
15	TomasVokoun	0.9177	0.9208	1705	0.9152	6.3000
16	OndrejPavelec	0.9177	0.9153	1700	0.9101	1.0000
17	TuukkaRask	0.9176	0.9183	857	0.9143	1.0000
18	SergeiBobrovsky	0.9173	0.9167	1500	0.9103	0.9000
19	SemyonVarlamov	0.9170	0.9223	759	0.9165	0.7700
20	MichalNeuvirth	0.9164	0.9156	1280	0.9143	0.7700
21	RyanMiller	0.9160	0.9157	1958	0.9148	6.2500
22	BrianBoucher	0.9159	0.9156	900	0.9187	0.9300
23	JamesReimer	0.9141	0.9222	1131	0.9184	0.5600
24	JoseTheodore	0.9140	0.9178	961	0.9158	1.1000
25	JonathanBernier	0.9139	0.9098	654	0.9176	0.7700
26	AnttiNiemi	0.9138	0.9175	1745	0.9158	2.0000
27	CurtisMcElhinney	0.9137	0.8997	708	0.9056	0.5700
28	DwayneRoloson	0.9136	0.9138	1519	0.9196	3.0000
29	MathieuGaron	0.9132	0.9027	884	0.9099	1.2000
30	KariLehtonen	0.9125	0.9152	2029	0.9183	2.7000
31	JohanHedberg	0.9122	0.9104	748	0.9134	1.0000
32	CraigAnderson	0.9121	0.9157	1519	0.9182	2.1300
33	NiklasBackstrom	0.9120	0.9184	1531	0.9205	6.0000
34	ScottClemmensen	0.9112	0.9102	835	0.9186	1.1000
35	AnteroNiittymaki	0.9101	0.9018	611	0.9105	2.0000
36	MartyTurco	0.9095	0.8974	799	0.9129	1.3000
37	JonathanQuick	0.9091	0.9162	1634	0.9208	1.9000
38	MartinBrodeur	0.9087	0.9057	1305	0.9177	5.2000
39	JonasGustavsson	0.9071	0.8914	617	0.9121	1.3000
40	JimmyHoward	0.9067	0.9100	1801	0.9137	0.8000
41	ChrisMason	0.9066	0.8921	853	0.9068	1.6000
42	SteveMason	0.9064	0.9002	1503	0.9123	0.7700
43	Jean-SebastienGiguere	0.9051	0.9029	762	0.9191	7.0000
44	DanEllis	0.9043	0.9003	1083	0.9143	1.5000
45	MiikkaKiprusoff	0.9020	0.9058	1910	0.9198	7.0000
46	PeterBudaj	0.9019	0.8961	1232	0.9119	1.2500
47	BrianElliott	0.9000	0.8947	1520	0.9126	0.9000
48	NikolaiKhabibulin	0.8999	0.8917	1385	0.9068	3.7500
49	RickDiPietro	0.8925	0.8847	772	0.9077	4.5000