

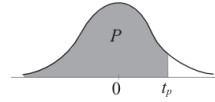
TABLA DISTRIBUCIÓN T-STUDENT

484 ESTADÍSTICA ECONÓMICA Y EMPRESARIAL

TABLA A.7. Función de distribución t-Student

Esta tabla proporciona los valores t_p , tales que

$$P = P(T \leq t_p) = \frac{\Gamma\left(\frac{n+1}{2}\right)}{\Gamma\left(\frac{n}{2}\right)\sqrt{n\pi}} \int_{-\infty}^{t_p} \left(1 + \frac{t^2}{n}\right)^{-\frac{1}{2}(n+1)} dt$$



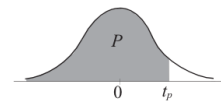
para $P > 0,5$, y siendo T una variable aleatoria t de Student con n -grados de libertad, ($n = 1, 2, \dots, 30, \dots, \infty$).
 Cuando $P \leq 0,5$, entonces como la función de densidad es simétrica respecto al origen, $t = 0$, tenemos:

$$P = P(T \leq t_p) = 1 - P(T \leq -t_p)$$

n \ P	P												
	0,600	0,700	0,750	0,800	0,850	0,900	0,925	0,950	0,975	0,990	0,995	0,999	,9995
1	0,325	0,727	1,000	1,376	1,963	3,078	4,165	6,314	12,71	31,82	63,66	318,3	636,6
2	0,289	0,617	0,816	1,061	1,386	1,886	2,282	2,920	4,303	6,965	9,925	22,33	31,60
3	0,277	0,584	0,765	0,978	1,250	1,638	1,924	2,353	3,182	4,541	5,841	10,21	12,92
4	0,271	0,569	0,741	0,941	1,190	1,533	1,778	2,132	2,776	3,747	4,604	7,173	8,610
5	0,267	0,559	0,727	0,920	1,156	1,476	1,699	2,015	2,571	3,365	4,032	5,893	6,869
6	0,265	0,553	0,718	0,906	1,134	1,440	1,650	1,943	2,447	3,143	3,707	5,208	5,959
7	0,263	0,549	0,711	0,896	1,119	1,415	1,617	1,895	2,365	2,998	3,499	4,785	5,408
8	0,262	0,546	0,706	0,889	1,108	1,397	1,592	1,850	2,306	2,896	3,355	4,501	5,041
9	0,261	0,543	0,703	0,883	1,100	1,383	1,574	1,833	2,262	2,821	3,250	4,297	4,781
10	0,260	0,542	0,700	0,879	1,093	1,372	1,559	1,812	2,228	2,764	3,169	4,144	4,587
11	0,260	0,540	0,697	0,876	1,088	1,363	1,548	1,796	2,201	2,718	3,106	4,025	4,437
12	0,259	0,539	0,695	0,873	1,083	1,356	1,538	1,782	2,179	2,681	3,055	3,930	4,318
13	0,259	0,538	0,694	0,870	1,079	1,350	1,530	1,771	2,160	2,650	3,012	3,852	4,221

TABLA A.7. Función de distribución t-Student (continuación)

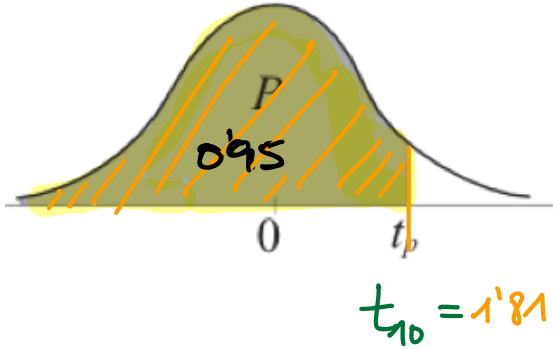
$$P = P(T \leq t_p) = 1 - P(T \leq -t_p)$$



n \ P	P												
	0,600	0,700	0,750	0,800	0,850	0,900	0,925	0,950	0,975	0,990	0,995	0,999	,9995
14	0,258	0,537	0,692	0,868	1,076	1,345	1,523	1,761	2,145	2,624	2,977	3,787	4,140
15	0,258	0,536	0,691	0,866	1,074	1,341	1,517	1,753	2,131	2,602	2,947	3,733	4,073
16	0,258	0,535	0,690	0,865	1,071	1,337	1,512	1,746	2,120	2,583	2,921	3,686	4,015
17	0,257	0,534	0,689	0,863	1,069	1,333	1,508	1,740	2,110	2,567	2,898	3,646	3,965
18	0,257	0,534	0,688	0,862	1,067	1,330	1,504	1,734	2,101	2,552	2,878	3,610	3,922
19	0,257	0,533	0,688	0,861	1,066	1,328	1,500	1,729	2,093	2,539	2,861	3,579	3,883
20	0,257	0,533	0,687	0,860	1,064	1,325	1,497	1,725	2,086	2,528	2,845	3,552	3,850
21	0,257	0,532	0,686	0,859	1,063	1,323	1,494	1,721	2,080	2,518	2,831	3,527	3,819
22	0,256	0,532	0,686	0,858	1,061	1,321	1,492	1,717	2,074	2,508	2,819	3,505	3,792
23	0,256	0,532	0,685	0,858	1,060	1,319	1,489	1,714	2,069	2,500	2,807	3,485	3,768
24	0,256	0,531	0,685	0,857	1,059	1,318	1,487	1,711	2,064	2,492	2,797	3,467	3,745
25	0,256	0,531	0,684	0,856	1,058	1,316	1,485	1,708	2,060	2,485	2,787	3,450	3,725
26	0,256	0,531	0,684	0,856	1,058	1,315	1,483	1,706	2,056	2,479	2,779	3,435	3,707
27	0,256	0,531	0,684	0,855	1,057	1,314	1,482	1,703	2,052	2,473	2,771	3,421	3,690
28	0,256	0,530	0,683	0,855	1,056	1,313	1,480	1,701	2,048	2,467	2,763	3,408	3,674
29	0,256	0,530	0,683	0,854	1,055	1,311	1,479	1,699	2,045	2,462	2,756	3,396	3,659
30	0,256	0,530	0,683	0,854	1,055	1,310	1,477	1,697	2,042	2,457	2,750	3,385	3,646
31	0,256	0,530	0,682	0,853	1,054	1,309	1,476	1,696	2,040	2,453	2,744	3,375	3,633
40	0,255	0,529	0,681	0,851	1,050	1,303	1,468	1,684	2,021	2,423	2,704	3,307	3,551
50	0,255	0,528	0,679	0,849	1,047	1,299	1,462	1,676	2,009	2,403	2,678	3,261	3,496
60	0,254	0,527	0,679	0,848	1,045	1,296	1,458	1,671	2,000	2,390	2,660	3,232	3,460
70	0,254	0,527	0,678	0,847	1,044	1,294	1,456	1,667	1,994	2,381	2,648	3,211	3,435
80	0,254	0,526	0,678	0,846	1,043	1,292	1,453	1,664	1,990	2,374	2,639	3,195	3,416
90	0,254	0,526	0,677	0,846	1,042	1,291	1,452	1,662	1,987	2,368	2,632	3,183	3,402
100	0,254	0,526	0,677	0,845	1,042	1,290	1,451	1,660	1,984	2,364	2,626	3,174	3,390
120	0,254	0,526	0,677	0,845	1,041	1,289	1,449	1,658	1,980	2,358	2,617	3,160	3,373
150	0,254	0,526	0,676	0,844	1,040	1,287	1,447	1,655	1,976	2,351	2,609	3,145	3,357
∞	0,253	0,524	0,674	0,842	1,036	1,282	1,440	1,645	1,960	2,326	2,576	3,090	3,291

ANEXO: TABLAS ESTADÍSTICAS 485

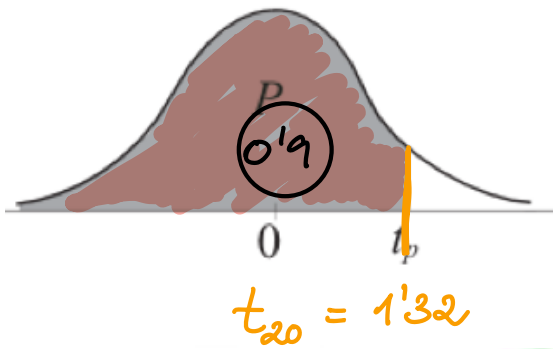




$q\alpha = 10$

$$P = (T \leq t_p) = 1 - P(T \leq -t_p)$$

n	P									
	0.600	0.700	0.750	0.800	0.850	0.900	0.925	0.950	0.975	
1	0.325	0.727	1.000	1.376	1.963	3.078	4.165	6.314	12.71	
2	0.289	0.617	0.816	1.061	1.386	1.886	2.282	2.920	4.303	
3	0.277	0.584	0.765	0.978	1.250	1.638	1.924	2.353	3.182	
4	0.271	0.569	0.741	0.941	1.190	1.533	1.778	2.182	2.776	
5	0.267	0.559	0.727	0.920	1.156	1.476	1.699	2.015	2.571	
6	0.265	0.553	0.718	0.906	1.134	1.440	1.650	1.943	2.447	
7	0.263	0.549	0.711	0.896	1.119	1.415	1.617	1.895	2.365	
8	0.262	0.546	0.706	0.889	1.108	1.397	1.592	1.850	2.306	
9	0.261	0.543	0.703	0.883	1.100	1.383	1.574	1.833	2.262	
10	0.260	0.542	0.700	0.879	1.093	1.372	1.559	1.812	2.228	
11	0.260	0.540	0.697	0.876	1.088	1.363	1.548	1.796	2.201	
12	0.259	0.539	0.695	0.873	1.083	1.356	1.538	1.782	2.179	
13	0.259	0.538	0.694	0.870	1.079	1.350	1.530	1.771	2.160	



$q\alpha =$

$$P = (T \leq t_p) = 1 - P(T \leq -t_p)$$

n	P												
	0.600	0.700	0.750	0.800	0.850	0.900	0.925	0.950	0.975	0.990	0.995	0.999	.9995
14	0.258	0.537	0.692	0.868	1.076	1.45	1.523	1.761	2.145	2.624	2.977	3.787	4.140
15	0.258	0.536	0.691	0.866	1.074	1.41	1.517	1.753	2.131	2.602	2.947	3.733	4.073
16	0.258	0.535	0.690	0.865	1.071	1.377	1.512	1.746	2.120	2.583	2.921	3.686	4.015
17	0.257	0.534	0.689	0.863	1.069	1.333	1.508	1.740	2.110	2.567	2.898	3.646	3.965
18	0.257	0.534	0.688	0.862	1.067	1.30	1.504	1.734	2.101	2.552	2.878	3.610	3.922
19	0.257	0.533	0.688	0.861	1.066	1.28	1.500	1.729	2.093	2.539	2.861	3.579	3.883
20	0.257	0.533	0.687	0.860	1.064	1.255	1.497	1.725	2.086	2.528	2.845	3.552	3.850
21	0.257	0.532	0.686	0.859	1.063	1.233	1.494	1.721	2.080	2.518	2.831	3.527	3.819
22	0.256	0.532	0.686	0.858	1.061	1.211	1.492	1.717	2.074	2.508	2.819	3.505	3.792
23	0.256	0.532	0.685	0.858	1.060	1.191	1.489	1.714	2.069	2.500	2.807	3.485	3.768
24	0.256	0.531	0.685	0.857	1.059	1.181	1.487	1.711	2.064	2.492	2.797	3.467	3.745
25	0.256	0.531	0.684	0.856	1.058	1.168	1.485	1.708	2.060	2.485	2.787	3.450	3.725
26	0.256	0.531	0.684	0.856	1.058	1.151	1.483	1.706	2.056	2.479	2.779	3.435	3.707
27	0.256	0.531	0.684	0.855	1.057	1.134	1.482	1.706	2.056	2.479	2.779	3.435	3.707
28	0.256	0.530	0.683	0.855	1.056	1.113	1.480	1.701	2.048	2.467	2.763	3.408	3.674
29	0.256	0.530	0.683	0.854	1.055	1.111	1.479	1.699	2.045	2.462	2.756	3.396	3.659
30	0.256	0.530	0.683	0.854	1.055	1.100	1.477	1.697	2.042	2.457	2.750	3.385	3.646
31	0.256	0.530	0.682	0.853	1.054	1.309	1.476	1.696	2.040	2.453	2.744	3.375	3.633
40	0.255	0.529	0.681	0.851	1.050	1.202	1.474	1.694	2.037	2.449	2.740	3.370	3.631
50	0.255	0.528	0.679	0.849	1.047	1.299	1.462	1.676	2.009	2.403	2.678	3.261	3.496
60	0.254	0.527	0.679	0.848	1.045	1.296	1.458	1.671	2.000	2.390	2.660	3.232	3.460
70	0.254	0.527	0.678	0.847	1.044	1.294	1.456	1.667	1.994	2.381	2.648	3.211	3.435
80	0.254	0.526	0.678	0.846	1.043	1.292	1.453	1.664	1.990	2.374	2.639	3.195	3.416
90	0.254	0.526	0.677	0.846	1.042	1.291	1.452	1.662	1.987	2.368	2.632	3.183	3.402
100	0.254	0.526	0.677	0.845	1.042	1.290	1.451	1.660	1.984	2.364	2.626	3.174	3.390
120	0.254	0.526	0.677	0.845	1.041	1.289	1.449	1.658	1.980	2.358	2.617	3.160	3.373
150	0.254	0.526	0.676	0.844	1.040	1.287	1.447	1.655	1.976	2.351	2.609	3.145	3.357
∞	0.253	0.524	0.674	0.842	1.036	1.282	1.440	1.645	1.960	2.326	2.576	3.090	3.291

