



## Supplemental Operational Performance Data

Set forth below are tables that provide supplemental information regarding the operational performance results for the three months ended December 31, 2018, as well as the prior eight quarterly reporting periods for the payment programs of Mastercard International Incorporated and Mastercard Europe SA (collectively, "Mastercard"), the principal operating subsidiaries of Mastercard Incorporated.

### 1. Branded Volume and Transactions

The tables below set forth the gross dollar volume ("GDV"), purchase volume, cash volume and the number of purchase transactions, cash transactions, and cards on a regional basis for Mastercard™-branded cards. Growth rates over prior periods are provided for volume-based data.

GDV (\$ Billions)											
All Mastercard Credit,											
Charge, Debit and Prepaid Programs	Q4'16	Q1'17	Q2'17	Q3'17	Q4'17	Q1'18	Q2'18	Q3'18	Q4'18	FY 2017	FY 2018
APMEA	\$377	\$370	\$388	\$407	\$431	\$440	\$454	\$447	\$468	\$1,596	\$1,809
Canada	38	34	39	41	43	39	44	44	46	157	173
Europe	336	311	356	395	413	407	434	438	459	1,476	1,738
Latin America	90	86	92	97	106	102	100	99	111	382	412
Worldwide less United States	841	802	875	941	994	988	1,032	1,027	1,084	3,611	4,132
United States	387	379	404	407	422	419	442	442	466	1,613	1,769
Worldwide	1,228	1,181	1,279	1,347	1,416	1,407	1,475	1,469	1,550	5,224	5,901
<b>Mastercard Credit and Charge Programs</b>											
Worldwide less United States	466	444	475	508	530	528	545	535	560	1,956	2,167
United States	189	178	196	198	207	194	211	213	228	780	846
Worldwide	654	623	671	705	738	722	756	748	787	2,736	3,014
<b>Mastercard Debit and Prepaid Programs</b>											
Worldwide less United States	375	357	400	433	464	460	487	492	525	1,654	1,964
United States	198	201	208	209	215	225	231	229	238	833	923
Worldwide	574	558	608	642	679	685	719	721	762	2,487	2,887

GDV Local Growth											
All Mastercard Credit,											
Charge, Debit and Prepaid Programs	Q4'16	Q1'17	Q2'17	Q3'17	Q4'17	Q1'18	Q2'18	Q3'18	Q4'18	FY 2017	FY 2018
APMEA	7.4%	8.3%	7.0%	8.2%	12.2%	13.0%	14.2%	13.0%	13.1%	9.0%	13.3%
Canada	9.4%	12.3%	10.2%	8.6%	9.6%	9.4%	9.2%	10.4%	11.7%	10.0%	10.2%
Europe	3.1%	1.3%	5.0%	14.8%	16.0%	18.7%	19.5%	18.5%	19.9%	9.6%	19.2%
<i>Europe adjusted for Article 8</i>	<b>16%</b>	<b>14%</b>	<b>15%</b>	<b>16%</b>	<b>17%</b>					<b>16%</b>	
Latin America	14.5%	15.5%	15.1%	14.6%	16.4%	17.0%	17.1%	16.2%	16.8%	15.4%	16.8%
Worldwide less United States	6.4%	6.3%	7.1%	11.5%	14.1%	15.6%	16.5%	15.5%	16.2%	9.9%	15.9%
<i>WW less USA adjusted for Article 8</i>	<b>11%</b>	<b>11%</b>	<b>11%</b>	<b>12%</b>	<b>15%</b>					<b>12%</b>	
United States	2.4%	1.9%	3.5%	6.2%	9.1%	10.5%	9.4%	8.7%	10.2%	5.2%	9.7%
Worldwide	5.1%	4.9%	5.9%	9.9%	12.6%	14.0%	14.2%	13.4%	14.3%	8.4%	14.0%
<i>Worldwide adjusted for Article 8</i>	<b>8%</b>	<b>8%</b>	<b>9%</b>	<b>10%</b>	<b>13%</b>					<b>10%</b>	
<b>Mastercard Credit and Charge Programs</b>											
Worldwide less United States	5.7%	7.2%	6.8%	8.7%	10.3%	11.7%	12.8%	11.7%	12.7%	8.3%	12.2%
United States	4.2%	5.4%	6.6%	8.6%	10.0%	9.0%	7.6%	7.7%	9.8%	7.7%	8.5%
Worldwide	5.3%	6.6%	6.7%	8.7%	10.2%	10.9%	11.3%	10.5%	11.8%	8.1%	11.1%
<b>Mastercard Debit and Prepaid Programs</b>											
Worldwide less United States	7.3%	5.3%	7.5%	15.0%	18.8%	20.4%	20.9%	20.0%	20.1%	11.9%	20.3%
United States	0.8%	-1.0%	0.8%	4.0%	8.3%	11.8%	11.1%	9.6%	10.7%	3.0%	10.8%
Worldwide	5.0%	2.9%	5.1%	11.2%	15.3%	17.4%	17.5%	16.5%	17.0%	8.7%	17.1%

Purchase Volume (\$ Billions)											
All Mastercard Credit,											
Charge, Debit and Prepaid Programs	Q4'16	Q1'17	Q2'17	Q3'17	Q4'17	Q1'18	Q2'18	Q3'18	Q4'18	FY 2017	FY 2018
APMEA	\$258	\$250	\$258	\$275	\$291	\$297	\$308	\$304	\$318	\$1,075	\$1,227
Canada	36	32	37	39	42	37	42	42	45	150	166
Europe	213	199	226	252	266	269	285	289	304	943	1,147
Latin America	56	55	57	61	67	65	64	62	70	240	262
Worldwide less United States	563	537	578	628	666	668	699	697	737	2,408	2,802
United States	333	324	348	347	366	359	384	385	408	1,385	1,536
Worldwide	896	860	926	975	1,032	1,028	1,083	1,082	1,145	3,793	4,338
<b>Mastercard Credit and Charge Programs</b>											
Worldwide less United States	427	407	435	466	489	488	505	495	519	1,797	2,008
United States	180	170	187	188	198	185	202	205	219	743	811
Worldwide	607	577	622	654	687	673	708	700	738	2,540	2,819
<b>Mastercard Debit and Prepaid Programs</b>											
Worldwide less United States	136	130	143	161	177	180	194	202	218	611	794
United States	153	154	161	160	168	174	182	180	189	642	725
Worldwide	289	283	303	321	345	355	376	382	407	1,253	1,519

Purchase Volume Local Growth											
All Mastercard Credit,											
Charge, Debit and Prepaid Programs	Q4'16	Q1'17	Q2'17	Q3'17	Q4'17	Q1'18	Q2'18	Q3'18	Q4'18	FY 2017	FY 2018
APMEA	8.0%	9.5%	6.6%	8.5%	10.2%	11.6%	14.9%	13.3%	13.4%	8.7%	13.3%
Canada	10.1%	13.1%	11.6%	9.2%	9.9%	9.7%	9.7%	10.5%	11.6%	10.8%	10.4%
Europe	-2.8%	-3.3%	1.9%	16.0%	17.6%	21.8%	23.1%	22.0%	23.0%	8.3%	22.5%
<i>Europe adjusted for Article 8</i>	<b>16%</b>	<b>16%</b>	<b>17%</b>	<b>18%</b>	<b>20%</b>					<b>18%</b>	
Latin America	16.9%	18.2%	18.6%	18.2%	20.7%	22.1%	22.0%	21.4%	21.5%	19.0%	21.7%
Worldwide less United States	4.5%	5.3%	6.1%	12.4%	14.0%	16.4%	18.4%	17.3%	17.8%	9.6%	17.5%
<i>WW less USA adjusted for Article 8</i>	<b>12%</b>	<b>13%</b>	<b>12%</b>	<b>13%</b>	<b>15%</b>					<b>13%</b>	
United States	2.7%	2.3%	3.8%	6.4%	10.0%	11.0%	10.5%	10.7%	11.4%	5.7%	10.9%
Worldwide	3.8%	4.2%	5.2%	10.2%	12.6%	14.5%	15.5%	14.9%	15.4%	8.1%	15.1%
<i>Worldwide adjusted for Article 8</i>	<b>8%</b>	<b>9%</b>	<b>9%</b>	<b>11%</b>	<b>13%</b>					<b>10%</b>	
<b>Mastercard Credit and Charge Programs</b>											
Worldwide less United States	6.0%	7.6%	7.1%	9.1%	11.1%	12.7%	13.9%	12.6%	13.3%	8.8%	13.1%
United States	3.8%	4.9%	6.1%	7.9%	10.0%	8.8%	8.2%	9.0%	10.4%	7.3%	9.1%
Worldwide	5.4%	6.8%	6.8%	8.8%	10.8%	11.6%	12.2%	11.6%	12.4%	8.4%	12.0%
<b>Mastercard Debit and Prepaid Programs</b>											
Worldwide less United States	0.2%	-1.2%	2.9%	23.0%	22.9%	27.7%	32.1%	30.7%	30.0%	12.0%	30.1%
United States	1.3%	-0.3%	1.3%	4.7%	9.9%	13.5%	13.2%	12.7%	12.7%	3.9%	13.0%
Worldwide	0.8%	-0.7%	2.0%	13.2%	16.2%	20.3%	22.2%	21.5%	21.3%	7.7%	21.4%

Purchase Transactions (Millions)											
All Mastercard Credit,											
Charge, Debit and Prepaid Programs	Q4'16	Q1'17	Q2'17	Q3'17	Q4'17	Q1'18	Q2'18	Q3'18	Q4'18	FY 2017	FY 2018
APMEA	4,110	4,044	4,301	4,553	4,798	4,760	5,218	5,464	5,832	17,696	21,274
Canada	543	502	571	582	599	554	635	651	698	2,254	2,538
Europe	5,133	4,993	5,607	6,021	6,461	6,455	7,324	7,772	8,416	23,082	29,968
Latin America	1,742	1,732	1,819	1,929	2,087	2,062	2,186	2,299	2,529	7,566	9,076
Worldwide less United States	11,528	11,271	12,299	13,084	13,944	13,831	15,363	16,187	17,475	50,597	62,856
United States	6,005	5,782	6,254	6,315	6,510	6,357	6,863	6,930	7,242	24,862	27,393
Worldwide	17,533	17,052	18,553	19,399	20,454	20,188	22,227	23,117	24,717	75,459	90,249
<b>Mastercard Credit and Charge Programs</b>											
Worldwide less United States	6,717	6,470	6,996	7,307	7,640	7,443	8,089	8,425	8,995	28,413	32,952
United States	2,065	1,885	2,095	2,137	2,220	2,020	2,248	2,321	2,484	8,337	9,073
Worldwide	8,782	8,355	9,090	9,444	9,860	9,463	10,337	10,746	11,480	36,750	42,025
<b>Mastercard Debit and Prepaid Programs</b>											
Worldwide less United States	4,811	4,801	5,303	5,777	6,304	6,388	7,274	7,762	8,480	22,185	29,904
United States	3,940	3,896	4,159	4,179	4,290	4,338	4,615	4,609	4,758	16,525	18,320
Worldwide	8,751	8,697	9,463	9,956	10,594	10,726	11,889	12,371	13,237	38,709	48,224

Purchase Transactions Growth											
All Mastercard Credit,											
Charge, Debit and Prepaid Programs	Q4'16	Q1'17	Q2'17	Q3'17	Q4'17	Q1'18	Q2'18	Q3'18	Q4'18	FY 2017	FY 2018
APMEA	25.0%	25.6%	22.0%	22.2%	16.7%	17.7%	21.3%	20.0%	21.5%	21.4%	20.2%
Canada	11.3%	12.4%	11.8%	10.5%	10.3%	10.5%	11.1%	11.8%	16.6%	11.2%	12.6%
Europe	4.0%	2.8%	8.8%	23.7%	25.9%	29.3%	30.6%	29.1%	30.3%	15.3%	29.8%
<i>Europe adjusted for Article 8</i>	<b>22%</b>	<b>22%</b>	<b>24%</b>	<b>26%</b>	<b>28%</b>					<b>25%</b>	
Latin America	14.7%	16.7%	16.4%	17.7%	19.8%	19.1%	20.2%	19.2%	21.2%	17.7%	20.0%
Worldwide less United States	12.7%	12.6%	14.4%	21.6%	21.0%	22.7%	24.9%	23.7%	25.3%	17.5%	24.2%
<i>WW less USA adjusted for Article 8</i>	<b>21%</b>	<b>22%</b>	<b>21%</b>	<b>23%</b>	<b>22%</b>					<b>22%</b>	
United States	1.9%	0.1%	1.4%	4.3%	8.4%	10.0%	9.7%	9.7%	11.2%	3.6%	10.2%
Worldwide	8.7%	8.1%	9.6%	15.4%	16.7%	18.4%	19.8%	19.2%	20.8%	12.5%	19.6%
<i>Worldwide adjusted for Article 8</i>	<b>14%</b>	<b>14%</b>	<b>14%</b>	<b>16%</b>	<b>17%</b>					<b>15%</b>	
<b>Mastercard Credit and Charge Programs</b>											
Worldwide less United States	11.4%	11.9%	12.5%	13.8%	13.7%	15.0%	15.6%	15.3%	17.7%	13.0%	16.0%
United States	3.6%	2.3%	3.9%	5.9%	7.5%	7.1%	7.3%	8.6%	11.9%	5.0%	8.8%
Worldwide	9.5%	9.6%	10.4%	11.9%	12.3%	13.3%	13.7%	13.8%	16.4%	11.1%	14.4%
<b>Mastercard Debit and Prepaid Programs</b>											
Worldwide less United States	14.5%	13.6%	16.9%	33.2%	31.0%	33.1%	37.2%	34.4%	34.5%	23.9%	34.8%
United States	0.9%	-0.9%	0.2%	3.5%	8.9%	11.3%	11.0%	10.3%	10.9%	2.9%	10.9%
Worldwide	8.0%	6.6%	8.9%	18.9%	21.1%	23.3%	25.6%	24.3%	25.0%	13.9%	24.6%

<b>Cash Volume (\$ Billions)</b>											
<b>All Mastercard Credit,</b>											
<b>Charge, Debit and Prepaid Programs</b>	<b>Q4'16</b>	<b>Q1'17</b>	<b>Q2'17</b>	<b>Q3'17</b>	<b>Q4'17</b>	<b>Q1'18</b>	<b>Q2'18</b>	<b>Q3'18</b>	<b>Q4'18</b>	<b>FY 2017</b>	<b>FY 2018</b>
APMEA	\$119	\$120	\$130	\$132	\$140	\$143	\$146	\$142	\$150	\$521	\$582
Canada	2	2	2	2	2	2	2	2	2	7	7
Europe	123	112	131	143	147	138	149	149	155	533	591
Latin America	34	32	35	36	39	37	37	37	40	142	150
Worldwide less United States	278	265	297	313	328	320	333	330	347	1,202	1,330
United States	54	56	57	59	56	60	58	57	58	228	233
Worldwide	332	321	353	372	384	380	392	387	405	1,430	1,563
<b>Mastercard Credit and Charge Programs</b>											
Worldwide less United States	39	37	39	41	41	40	40	39	40	159	160
United States	8	8	9	10	9	9	9	8	9	37	35
Worldwide	47	46	48	52	50	49	49	48	49	196	195
<b>Mastercard Debit and Prepaid Programs</b>											
Worldwide less United States	239	228	257	272	287	280	293	291	307	1,043	1,171
United States	46	47	48	49	47	50	50	49	49	191	198
Worldwide	285	275	305	321	334	331	343	339	355	1,234	1,368

<b>Cash Volume Local Growth</b>											
<b>All Mastercard Credit,</b>											
<b>Charge, Debit and Prepaid Programs</b>	<b>Q4'16</b>	<b>Q1'17</b>	<b>Q2'17</b>	<b>Q3'17</b>	<b>Q4'17</b>	<b>Q1'18</b>	<b>Q2'18</b>	<b>Q3'18</b>	<b>Q4'18</b>	<b>FY 2017</b>	<b>FY 2018</b>
APMEA	6.0%	5.9%	7.7%	7.4%	16.8%	16.1%	12.9%	12.4%	12.5%	9.5%	13.4%
Canada	-3.6%	-2.6%	-13.0%	-2.0%	2.2%	4.5%	-1.0%	9.3%	13.8%	-4.1%	6.6%
Europe	15.3%	10.5%	11.0%	12.6%	13.3%	13.0%	13.2%	12.2%	14.2%	11.9%	13.2%
Latin America	10.8%	11.2%	9.8%	9.0%	9.8%	8.9%	9.6%	8.3%	9.3%	9.9%	9.0%
Worldwide less United States	10.4%	8.3%	9.2%	9.8%	14.3%	13.8%	12.6%	11.8%	12.9%	10.5%	12.8%
United States	1.1%	-0.4%	1.5%	4.8%	4.0%	7.3%	2.8%	-3.3%	2.6%	2.5%	2.2%
Worldwide	8.8%	6.7%	7.9%	9.0%	12.7%	12.8%	11.0%	9.3%	11.3%	9.2%	11.1%
<b>Mastercard Credit and Charge Programs</b>											
Worldwide less United States	2.3%	2.6%	3.2%	4.3%	1.4%	0.2%	0.6%	0.7%	4.9%	2.9%	1.6%
United States	13.3%	16.0%	17.5%	23.4%	9.1%	12.4%	-4.7%	-16.8%	-3.0%	16.5%	-3.7%
Worldwide	4.1%	4.8%	5.6%	7.6%	2.7%	2.4%	-0.4%	-2.9%	3.4%	5.2%	0.6%
<b>Mastercard Debit and Prepaid Programs</b>											
Worldwide less United States	11.9%	9.3%	10.2%	10.7%	16.4%	16.1%	14.4%	13.5%	14.0%	11.8%	14.5%
United States	-0.8%	-2.9%	-1.0%	1.6%	3.1%	6.4%	4.2%	-0.5%	3.6%	0.1%	3.4%
Worldwide	9.6%	7.0%	8.3%	9.2%	14.3%	14.5%	12.8%	11.3%	12.4%	9.8%	12.7%

<b>Cash Transactions (Millions)</b>											
<b>All Mastercard Credit,</b>											
<b>Charge, Debit and Prepaid Programs</b>	<b>Q4'16</b>	<b>Q1'17</b>	<b>Q2'17</b>	<b>Q3'17</b>	<b>Q4'17</b>	<b>Q1'18</b>	<b>Q2'18</b>	<b>Q3'18</b>	<b>Q4'18</b>	<b>FY 2017</b>	<b>FY 2018</b>
APMEA	1,293	1,279	1,365	1,374	1,468	1,468	1,530	1,570	1,670	5,486	6,238
Canada	5	6	6	6	5	6	6	6	6	22	25
Europe	925	861	958	977	1,001	938	1,053	1,065	1,101	3,797	4,157
Latin America	264	254	259	261	279	264	272	273	297	1,054	1,106
Worldwide less United States	2,487	2,400	2,587	2,618	2,753	2,675	2,861	2,915	3,075	10,359	11,525
United States	324	320	338	346	326	328	340	337	329	1,329	1,333
Worldwide	2,811	2,720	2,925	2,964	3,079	3,003	3,200	3,252	3,404	11,688	12,859
<b>Mastercard Credit and Charge Programs</b>											
Worldwide less United States	189	175	186	185	183	170	181	183	187	729	720
United States	9	8	9	9	9	8	8	9	9	35	34
Worldwide	198	183	195	195	192	178	189	191	196	765	754
<b>Mastercard Debit and Prepaid Programs</b>											
Worldwide less United States	2,298	2,225	2,401	2,433	2,570	2,506	2,680	2,732	2,887	9,629	10,805
United States	315	312	329	336	317	319	331	328	321	1,294	1,299
Worldwide	2,613	2,537	2,730	2,769	2,887	2,825	3,011	3,060	3,208	10,923	12,104

<b>Cash Transactions Growth</b>											
<b>All Mastercard Credit,</b>											
<b>Charge, Debit and Prepaid Programs</b>	<b>Q4'16</b>	<b>Q1'17</b>	<b>Q2'17</b>	<b>Q3'17</b>	<b>Q4'17</b>	<b>Q1'18</b>	<b>Q2'18</b>	<b>Q3'18</b>	<b>Q4'18</b>	<b>FY 2017</b>	<b>FY 2018</b>
APMEA	7.9%	6.2%	8.6%	5.9%	13.5%	14.8%	12.1%	14.2%	13.8%	8.6%	13.7%
Canada	-3.2%	2.6%	-3.0%	-0.4%	0.0%	2.9%	14.7%	15.5%	15.2%	-0.2%	12.1%
Europe	9.8%	6.1%	5.3%	6.6%	8.2%	8.8%	9.9%	9.1%	10.0%	6.6%	9.5%
Latin America	5.8%	5.7%	3.3%	3.6%	5.8%	4.0%	4.7%	4.4%	6.5%	4.6%	4.9%
Worldwide less United States	8.3%	6.1%	6.8%	5.9%	10.7%	11.5%	10.6%	11.3%	11.7%	7.4%	11.3%
United States	-2.4%	-5.4%	-3.3%	-1.3%	0.5%	2.4%	0.5%	-2.5%	1.1%	-2.4%	0.3%
Worldwide	7.0%	4.6%	5.5%	5.0%	9.5%	10.4%	9.4%	9.7%	10.5%	6.2%	10.0%
<b>Mastercard Credit and Charge Programs</b>											
Worldwide less United States	-0.1%	-0.9%	-1.1%	-0.6%	-3.2%	-2.7%	-3.1%	-1.4%	2.3%	-1.5%	-1.2%
United States	1.0%	-4.7%	-5.2%	-1.4%	-2.9%	0.2%	-5.0%	-8.0%	-1.9%	-3.5%	-3.8%
Worldwide	0.0%	-1.1%	-1.3%	-0.6%	-3.2%	-2.6%	-3.2%	-1.7%	2.1%	-1.6%	-1.3%
<b>Mastercard Debit and Prepaid Programs</b>											
Worldwide less United States	9.1%	6.7%	7.4%	6.5%	11.9%	12.6%	11.6%	12.3%	12.3%	8.1%	12.2%
United States	-2.5%	-5.4%	-3.2%	-1.3%	0.6%	2.4%	0.6%	-2.4%	1.2%	-2.4%	0.4%
Worldwide	7.6%	5.0%	6.0%	5.5%	10.5%	11.3%	10.3%	10.5%	11.1%	6.8%	10.8%

<b>Cards (Millions)</b>											
<b>All Mastercard Credit,</b>											
<b>Charge, Debit and Prepaid Programs</b>	<b>Q4'16</b>	<b>Q1'17</b>	<b>Q2'17</b>	<b>Q3'17</b>	<b>Q4'17</b>	<b>Q1'18</b>	<b>Q2'18</b>	<b>Q3'18</b>	<b>Q4'18</b>	<b>FY 2017</b>	<b>FY 2018</b>
APMEA	613	634	655	683	698	714	737	764	802	698	802
Canada	48	49	49	50	52	56	58	59	61	52	61
Europe	431	439	449	465	475	488	500	513	530	475	530
Latin America	165	166	168	172	176	168	173	178	184	176	184
Worldwide less United States	1,257	1,288	1,321	1,370	1,402	1,426	1,468	1,513	1,576	1,402	1,576
United States	391	391	396	399	410	416	426	434	446	410	446
Worldwide	1,648	1,679	1,717	1,769	1,812	1,842	1,895	1,947	2,022	1,812	2,022
<b>Mastercard Credit and Charge Programs</b>											
Worldwide less United States	565	568	576	590	601	604	615	628	644	601	644
United States	200	202	205	207	211	210	218	222	231	211	231
Worldwide	765	770	780	797	812	814	833	850	874	812	874
<b>Mastercard Debit and Prepaid Programs</b>											
Worldwide less United States	692	720	745	780	801	822	853	885	933	801	933
United States	191	189	192	192	199	205	209	212	216	199	216
Worldwide	883	909	936	972	1,001	1,027	1,062	1,097	1,148	1,001	1,148

<b>Cards Growth</b>											
<b>All Mastercard Credit,</b>											
<b>Charge, Debit and Prepaid Programs</b>	<b>Q4'16</b>	<b>Q1'17</b>	<b>Q2'17</b>	<b>Q3'17</b>	<b>Q4'17</b>	<b>Q1'18</b>	<b>Q2'18</b>	<b>Q3'18</b>	<b>Q4'18</b>	<b>FY 2017</b>	<b>FY 2018</b>
APMEA	12.3%	12.8%	13.1%	15.3%	13.8%	12.6%	12.6%	11.8%	14.8%	13.8%	14.8%
Canada	0.8%	1.0%	9.8%	9.5%	9.0%	14.7%	17.6%	17.3%	15.8%	9.0%	15.8%
Europe	8.6%	9.1%	8.5%	10.4%	10.3%	11.1%	11.5%	10.4%	11.6%	10.3%	11.6%
Latin America	2.3%	2.1%	3.6%	4.9%	6.8%	1.1%	2.9%	3.5%	4.3%	6.8%	4.3%
Worldwide less United States	9.2%	9.6%	10.1%	12.0%	11.5%	10.7%	11.2%	10.5%	12.4%	11.5%	12.4%
United States	4.9%	3.0%	3.5%	4.3%	4.9%	6.3%	7.6%	8.7%	8.8%	4.9%	8.8%
Worldwide	8.1%	8.0%	8.5%	10.2%	10.0%	9.7%	10.3%	10.1%	11.6%	10.0%	11.6%
<b>Mastercard Credit and Charge Programs</b>											
Worldwide less United States	0.0%	0.6%	2.4%	5.7%	6.4%	6.3%	6.9%	6.5%	7.2%	6.4%	7.2%
United States	5.2%	5.4%	5.3%	5.4%	5.4%	4.2%	6.3%	7.4%	9.3%	5.4%	9.3%
Worldwide	1.3%	1.8%	3.1%	5.6%	6.1%	5.8%	6.7%	6.7%	7.7%	6.1%	7.7%
<b>Mastercard Debit and Prepaid Programs</b>											
Worldwide less United States	17.9%	17.8%	17.0%	17.3%	15.8%	14.1%	14.5%	13.5%	16.4%	15.8%	16.4%
United States	4.5%	0.6%	1.7%	3.1%	4.4%	8.5%	8.9%	10.0%	8.3%	4.4%	8.3%
Worldwide	14.7%	13.8%	13.5%	14.2%	13.3%	12.9%	13.4%	12.8%	14.8%	13.3%	14.8%

Note that the figures in the preceding tables may not sum due to rounding; growth represents change from the comparable year-ago period.

**Footnote**

The tables set forth the gross dollar volume (“GDV”), purchase volume, cash volume and the number of purchase transactions, cash transactions, and cards on a regional and global basis for Mastercard™-branded cards. Growth rates over prior periods are provided for volume-based data.

Debit transactions on Maestro® and Cirrus®-branded cards and transactions involving brands other than Mastercard are not included in the preceding tables.

For purposes of the table: GDV represents purchase volume plus cash volume and includes the impact of balance transfers and convenience checks; “purchase volume” means the aggregate dollar amount of purchases made with Mastercard-branded cards for the relevant period; and “cash volume” means the aggregate dollar amount of cash disbursements obtained with Mastercard-branded cards for the relevant period. The number of cards includes virtual cards, which are Mastercard-branded payment accounts that do not generally have physical cards associated with them.

The Mastercard payment product is comprised of credit, charge, debit and prepaid programs, and data relating to each type of program is included in the tables. Debit programs include Mastercard-branded debit programs where the primary means of cardholder validation at the point of sale is for cardholders either to sign a sales receipt or enter a PIN. The tables include information with respect to transactions involving Mastercard-branded cards that are not switched by Mastercard and transactions for which Mastercard does not earn significant revenues.

Information denominated in U.S. dollars is calculated by applying an established U.S. dollar/local currency exchange rate for each local currency in which Mastercard volumes are reported. These exchange rates are calculated on a quarterly basis using the average exchange rate for each quarter. Mastercard reports period-over-period rates of change in purchase volume and cash volume on the basis of local currency information, in order to eliminate the impact of changes in the value of foreign currencies against the U.S. dollar in calculating such rates of change.

The data set forth in the GDV, purchase volume, purchase transactions, cash volume and cash transactions columns is provided by Mastercard customers and is subject to verification by Mastercard and partial cross-checking against information provided by Mastercard’s transaction switching systems. The data set forth in the cards columns is provided by Mastercard customers and is subject to certain limited verification by Mastercard. A portion of the data set forth in the cards columns reflects the impact of routine portfolio changes among customers and other practices that may lead to over counting of the underlying data in certain circumstances. All data is subject to revision and amendment by Mastercard or Mastercard’s customers.

**Effective Q1’18, our operational metrics reflect the impact of the Venezuela deconsolidation. Prior to Q1’18 all metrics include Venezuela. We are providing additional information regarding our Switched Transactions and Card growth rates. The adjusted growth rates eliminate Venezuelan Switched Transactions and Card counts from prior periods. In addition, starting this quarter, we are providing further adjusted growth rates for switched transactions and adjusted rates for cross border volume to normalize for the effects of differing switching days between periods. This information is being provided so that you can better understand the underlying growth rates of our operating metrics.**

Article 8 of the EU Interchange Fee Regulation related to card payments that became effective June 9, 2016 states that a network can no longer charge fees on domestic EEA payment transactions that do not use its payment brand. Prior to that, Mastercard collected a de minimis assessment fee in a few countries, particularly France, on transactions with Mastercard co-badged cards if the brands of domestic networks (as opposed to Mastercard) were used. As a result, the non-Mastercard co-badged volume is no longer being included.

To aid in understanding the underlying trends in the business, the table above reflects adjusted growth rates for the impact of Article 8, by eliminating the related co-badged volumes where relevant.

## 2. Switched Transactions

The table below sets forth the total number of transactions switched by Mastercard and growth from the comparable year-ago period.

Period		Switched	Actual Growth	Normalized Growth	Normalized Growth
		Trans. (Mil.)		Excluding Venezuela <sup>(1)</sup>	Excluding Venezuela and Equalizing Switching Days <sup>(1)(2)</sup>
2018Q4	(3)	20,124	13.4%	19%	17%
2018Q3	(4)	18,825	11.7%	16%	18%
2018Q2		18,161	13.4%	17%	17%
2018Q1	(3)	16,681	13.5%	17%	16%
2017Q4	(4)	17,739	16.7%	15%	17%
2017Q3		16,851	16.6%	15%	15%
2017Q2		16,014	17.0%	16%	16%
2017Q1	(4)	14,700	16.7%	16%	17%
2016Q4		15,200	17.2%	16%	16%
FY 2018	(3)	73,791	13.0%	17%	17%
FY 2017	(5)	65,304	16.7%	15%	16%

## 3. Cross Border Volume

The table below sets forth the Cross Border Volume Growth from the comparable year-ago period, on a local currency basis and U.S. dollar-converted basis, for all Mastercard-branded programs.

Period		Actual Growth	Normalized Growth	Actual Growth	Normalized Growth
		(Local)	(Local) <sup>(2)</sup>	(USD)	(USD) <sup>(2)</sup>
2018Q4	(3)	18.4%	17%	13.8%	12%
2018Q3	(4)	16.6%	18%	13.5%	15%
2018Q2		19.4%	19%	23.6%	24%
2018Q1	(3)	21.5%	20%	31.8%	30%
2017Q4	(4)	16.6%	18%	22.4%	24%
2017Q3		15.1%	15%	17.4%	17%
2017Q2		13.6%	14%	10.1%	10%
2017Q1	(4)	12.8%	14%	9.6%	11%
2016Q4		12.9%	13%	7.9%	8%
FY 2018	(3)	18.9%	18%	19.9%	20%
FY 2017	(5)	14.6%	15%	15.0%	15%

### Note:

- (1) Growth rates eliminate Venezuela transactions from current and past periods
- (2) Growth rates adjusted to eliminate the effects of differing switching days between periods
- (3) There was one more switching day in this period vs. the same period the previous year
- (4) There was one less switching day in this period vs. the same period the previous year
- (5) There were two less switching days in this period vs. the same period the previous year



**4. Cards**

The tables below set forth the number of Mastercard, Maestro and Total Cards with growth rates from the comparable year-ago period.

Mastercard Cards				Maestro Cards				Total WW Mastercard & Maestro Cards			
Period	Cards (Mil.)	Actual Growth	Growth Adj for Ven	Period	Cards (Mil.)	Actual Growth	Growth Adj for Ven	Period	Cards (Mil.)	Actual Growth	Growth Adj for Ven
2018Q4	2,022	11.6%	12%	2018Q4	496	-16.7%	-10%	2018Q4	2,518	4.6%	7%
2018Q3	1,947	10.1%	11%	2018Q3	517	-14.1%	-8%	2018Q3	2,464	3.9%	6%
2018Q2	1,895	10.3%	11%	2018Q2	527	-13.6%	-8%	2018Q2	2,421	4.1%	6%
2018Q1	1,842	9.7%	10%	2018Q1	536	-15.0%	-10%	2018Q1	2,378	2.9%	5%
2017Q4	1,812	10.0%	10%	2017Q4	595	-7.6%	-9%	2017Q4	2,407	5.0%	5%
2017Q3	1,769	10.2%	10%	2017Q3	602	-7.6%	-9%	2017Q3	2,371	5.0%	5%
2017Q2	1,717	8.5%	9%	2017Q2	610	-7.7%	-9%	2017Q2	2,327	3.7%	4%
2017Q1	1,679	8.0%	8%	2017Q1	630	-4.8%	-5%	2017Q1	2,310	4.1%	4%
2016Q4	1,648	8.1%	8%	2016Q4	644	-4.8%	-5%	2016Q4	2,292	4.1%	4%