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Management Discussion

International Business Machines Corporation and Subsidiary Companies

solutions, customer decisions, and as well as other factors, which may include, but are not limited to, macroeconomic environment or external events.

Systems

(\$ in millions)

For the year ended December 31:	2020	2019	Yr.-to-Yr. Percent Change	Yr.-to-Yr. Percent Change Adjusted for Currency
Systems external revenue	\$6,978	\$7,604	(8.2)%	(8.7)%
Systems Hardware	\$5,481	\$5,918	(7.4)%	(8.0)%
IBM Z			1.9	1.2
Power Systems			(22.4)	(22.9)
Storage Systems			(6.1)	(6.7)
Operating Systems Software	1,497	1,686	(11.2)	(11.2)

Systems revenue of \$6,978 million decreased 8.2 percent year to year as reported (9 percent adjusted for currency). Our Systems portfolio continues to deliver critical and lasting value to enterprise clients in support of our hybrid cloud strategy. Systems Hardware revenue of \$5,481 million declined 7.4 percent as reported (8 percent adjusted for currency), driven primarily by declines in Power Systems and Storage Systems, partially offset by year-to-year growth in IBM Z. Operating Systems Software revenue of \$1,497 million declined 11.2 percent as reported (11 percent adjusted for currency) compared to the prior year.

Within Systems Hardware, IBM Z revenue increased 1.9 percent as reported (1 percent adjusted for currency) despite an elongated z15 adoption cycle as a result of the challenging environment. The full-year growth in IBM Z reflects the importance of this high-value, secure and scalable platform with cloud native development capabilities. Our installed base of MIPS is more than 3.5 times the level of a decade ago, with 60 percent of our install base in new workload areas such as Linux.

Power Systems revenue decreased 22.4 percent as reported (23 percent adjusted for currency) year to year, reflecting the product cycles across the Power Systems portfolio.

Storage Systems revenue decreased 6.1 percent as reported (7 percent adjusted for currency) year to year, driven primarily by declines in high-end storage which is a reflection of the IBM Z cycle.

Within Systems, cloud revenue of \$2.9 billion declined 3 percent as reported and adjusted for currency.

(\$ in millions)

For the year ended December 31:	2020	2019	Yr.-to-Yr. Percent/ Margin Change
Systems			
External Systems Hardware gross profit	\$2,668	\$2,622	1.8 %
External Systems Hardware gross profit margin	48.7 %	44.3 %	4.4 pts.
External Operating Systems Software gross profit	\$1,232	\$1,412	(12.8)%
External Operating Systems Software gross profit margin	82.3 %	83.8 %	(1.5)pts.
External total gross profit	\$3,899	\$4,034	(3.3)%
External total gross profit margin	55.9 %	53.1 %	2.8 pts.
Pre-tax income	\$ 449	\$ 701	(36.0)%
Pre-tax margin	5.8 %	8.4 %	(2.7)pts.

The Systems gross profit margin increased 2.8 points to 55.9 percent in 2020 compared to the prior year, driven primarily by margin improvements in IBM Z and Power Systems, and a mix to IBM Z hardware. Pre-tax income of \$449 million declined 36.0 percent and pre-tax margin decreased 2.7 points year to year to 5.8 percent, driven primarily by the higher level of workforce rebalancing charges in the current year, which had 2.5 points of impact on the pre-tax margin.